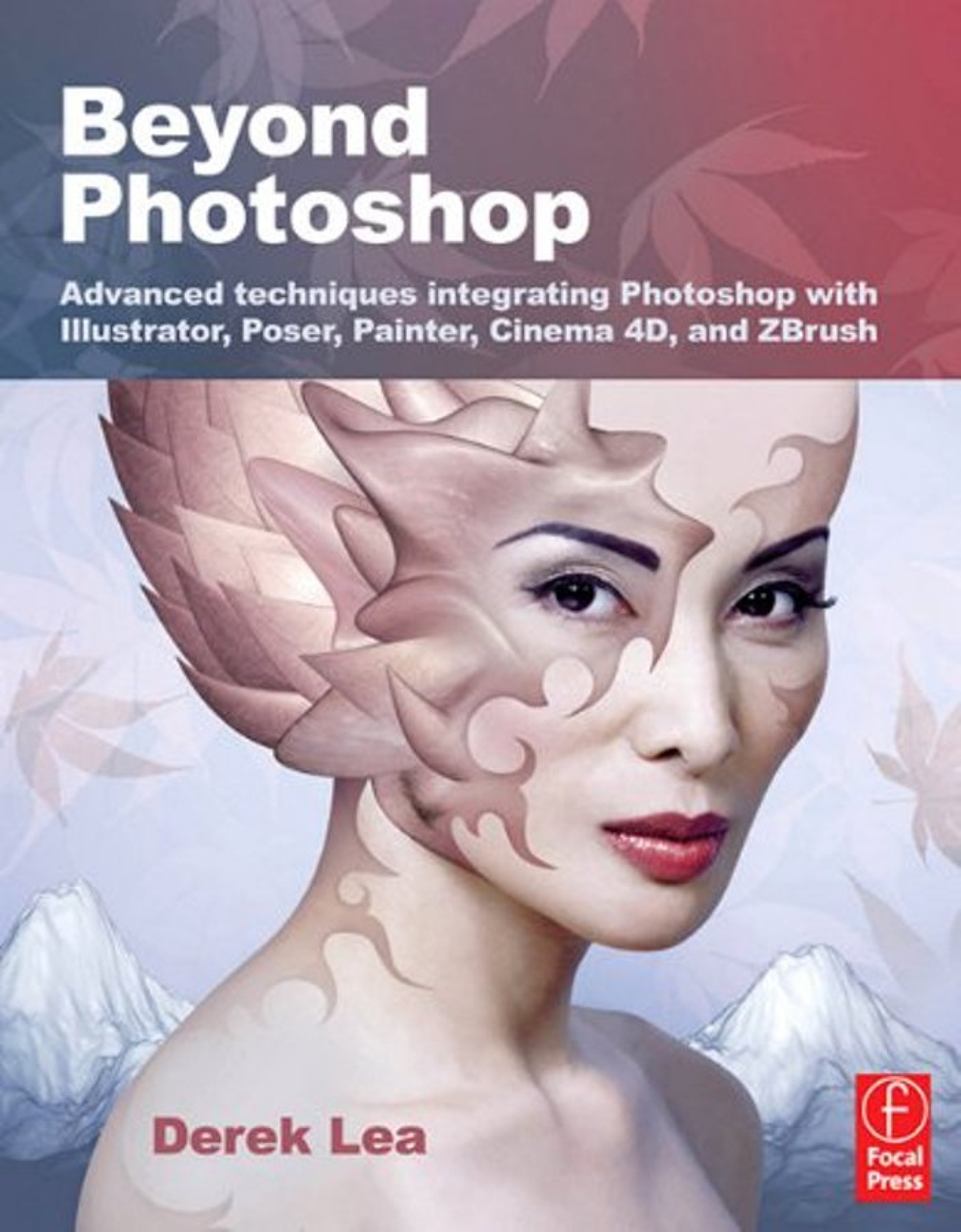
Beyond Photoshop

Advanced techniques integrating Photoshop with Illustrator, Poser, Painter, Cinema 4D, and ZBrush



Derek Lea

Focal Press

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For my wife, Janet. I would be absolutely lost without you.

Foreword

Foreword by Issac Stolzenbach, former Managing Editor, *Photoshop User* magazine; current Managing Editor of *Layers*: The How-to Magazine For Everything Adobe.

The quintessential amalgamation of inspirational and instructional

This ambitious book you hold in your hands is exactly the book that you or I would've written had we the talent, training, time—and fewer excuses—as Professor Derek Lea. Thankfully, Derek didn't take the excuse-laden path of least resistance. Instead, he undertook the arduous challenge of mastering the hottest software in the creative market. He studied the interoperability of these programs, plucking out the most useful bits of each experience, and incorporated them into his own workflow, which resulted in a bounty of stunning artwork. He kept notes along the way and vetted the resulting techniques by sharing them with the creative communities behind such award-winning publications as *Photoshop User*, *Computer Arts* and *Computer Arts Projects*, *Digital Camera*, *.net*, *Advanced Photoshop*, and *Digital Creative Arts* magazines.

Sounds good, right? But is this book for *you*. Go ahead and flip through the pages and see if the artwork speaks to you, then come on back here and I'll tell you why this book is probably for you, and why it's an essential next step in Derek's oeuvre.

Welcome back! That's some killer artwork, right? This guy's got an eye for aesthetics—and he knows how to communicate that vision too—you'll actually *learn* how to do that stuff. What? Yeah, sure thing, go head up to the checkout counter, we'll chat more when you get this home.

Derek has been a professional digital artist for more than a decade and he learned how to use creative software the same way most of us do (for the most part): we poke around in Photoshop, exploring the tools and menu items, then, once we're overwhelmed from being unable to reach our artistic vision due to the technical complexity of the software, we head up to the bookstore or library and seek out work from someone who is both inspired and inspiring—an all too rare combination. We may or may not grab the book based on the images we see within or perhaps the random, gonzoesque wordfreak blathering in the foreword persuades us to make the purchase. Either way, if we do end up taking the book home, when we get it home and take a closer look, we find that the author is either a talented artist or a gifted teacher—it's the rarest Pokémon to find both powers in the same creature—and we find this time and time again.

The techniques are awesome, but the artist doesn't aptly communicate everything they're doing, so the book gets chucked into the "inspirational" pile. Or the techniques are written in a way that resonates in our heads and our brains sop up the information like a biscuit on that last splash of Sunday gravy: we finally learn those shortcuts; we discover where to go to make our own shortcuts; and—after gaining a little dexterity in our fingers—we realize that using them is indeed a faster way to work. That sort of book does teach us something, but our artwork will still suck because the author was an educator, not an artist. The book's images were picked up from a stock photography agency and the end results are meekly presented as being "…for demonstration purposes only."

I've edited Derek's work for a number of years. It's been a pleasure because the guy really gets it—the art, the people, the culture, the software—with the digital arts community. What was really compelling about his work was that it got us up from our desks and engaged with the world around us. He had us dusting off old scanners, blow-drying fax paper, and cleaning out the gutters…errr wait, that was the wife. Anyway, it was sneaky, getting us out of our chairs to go collect a few leaves, but the end result was glorious—we discovered that there is a whole world out there just dying to be incorporated into our designs by our own hand. It sounds novel now, but after living day-in-and-day-out in the digital darkroom, your eyes will go from squinting like a prisoner in Plato's cave to wide-eyed revelation when exposed to the light of this sort of knowledge.

When Derek asked me to write the foreword to his next book, I was flattered and compelled. Flattered because the guy has been such an inspirational educator to me and to many of the folks with whom I've worked. Compelled because if ever a forthright handful of words need be said about one educator among the sea of digital arts instructors out there, it's Derek Lea.

He's inspiring to me because he works in much the same way I do: Crank up the tunes, let the eyes roll back and allow the mind's eye—floating in that personal, ethereal realm between magic and matter; between id and ego; between life and death—to take control, and create. Create! *Create!* He's an inspiration to the people I work with because his techniques are not only fresh, but they don't get the reader all tangled up in the overly technical tomfoolery that some use to baffle the reader with their "wisdom" rather than propel them into manifesting beauty through simplicity.

Beyond the artwork, beyond the talent, beyond the book you have in your hands, rests the reason why I've gathered these few words of praise—the man. One of the main things I've always admired about Derek—beyond all that aforementioned genius—is the fact that he's the embodiment of WYSIWYG. Simply put, Derek is a what-you-see-is-what-you-get type of guy. He doesn't put on airs pretending to be something he's not; he doesn't say that he's going to do something and not do it; and his grace rests in his candor. Just ask him about how he obtained his first copy of Photoshop and he'll bluntly relay that it was acquired through a five-finger discount—plucked from a new scanner box and plopped into an old jacket pocket—while working at a soul-sucking job as a clothing company's designer. (Hey, they needed the *scanner*, not the throwaway copy of Photoshop 2.5 that came with it, right?)

Now, thankfully, Derek has reached what many consider the summit of any digital art instructor's career: Imparting knowledge to the masses in the most rewarding and prolific way as a tenure-track digital arts professor at Centennial College in Toronto, Ontario, Canada.

The next time you're in your office, when you glance over at that empty space between the inspirational shelf and the educational shelf, if you find yourself murmuring curses about there being nothing that's inspirationally educational or educationally inspirational—and you didn't leave with this book, you and I both know, until the talent flows and the excuses ebb: You'll have no one to blame for that empty space on your self but yourself.

All the best to you and yours

–Issac Stolzenbach

Acknowledgments

This was a very difficult book to write. I underestimated the scope of the project. I underestimated the learning curve to master each program, and I underestimated the time it would take to pull it all together. I also underestimated how it would impact the lives of those around me. First and foremost, I must thank my wife, Janet. She always supports me in these projects, no matter how hard it is on her; she always recognizes the importance, tells me to go for it, and makes sure that I get it done. We have two young children: Charlotte and Isabella. Caring for young children is no easy task at the best of times, and when Dad is writing a book on top of everything else, it demands even more from Mom. So, once again: Thank you, Janet. Janet and I are also very fortunate to have supportive siblings and families. A huge thanks goes out to my sister Lisa and Janet's sister Lesley as well as brother-in-law Tom, who were always there to volunteer to help out. The kids love you all anyway, but your support during this time was huge. Oh, and thanks for all the chicken wings and quiche.

Thanks to Valerie Geary, my commissioning editor at Focal Press. She was cool as ice every time I called her with a meltdown, saying that there was no way that I could turn in the book on time (this happened a lot). However, in some ways it seems appropriate because this whole thing began as her idea. Also thanks to Carlin Reagan at Focal Press, who, alongside Valerie, bore the brunt of said meltdowns and helped out along the way. You guys are great. Seriously, I can't imagine working with anyone else.

Mike Shaw is apparently a sucker for punishment. This senior quality engineer from Adobe should have learned his lesson during his involvement with the first two editions of *Creative Photoshop*, but thankfully he did not. Mike is the guy who goes through all the details in the manuscript in microscopic detail and makes sure it all works out perfectly. This is no easy task, yet he somehow does it really fast. Thanks, Mike.

Patrick Goski is a dreadlocked Canadian 3D overlord. He was the go-to guy for all things ZBrush and Cinema 4D. If it weren't for him, I seriously don't know what I would have done with about 100 pages of this book. His input was essential, and I am thankful for his brilliance, easygoing nature, and meticulous attention to detail. Thanks, Patrick.

Issac Stolzenbach was the persuasive managing editor who convinced me to do a regular column in *Photoshop User* magazine. I really thought I was finished with magazines after I stopped contributing to *Computer Arts*, but Issac made it fun again. Issac has a writing style and wit about him that made him my first choice to write the Foreword for this book. Thankfully, he agreed. If more editors were as great to work with as Issac, I would probably still be doing a lot more magazine work, but he is a rarity. Any title will be lucky to have him on board.

Thanks to all the companies (and people working at those companies) that supplied software and support for the contents of this book. I think the importance of what you do is evident in this book, but certainly not limited to it. Thanks for making some of the best creative tools on the planet.

And finally, thanks to you, the readers. If you guys weren't there in the forums, on the Facebook page, reading my other books and magazine articles, or simply providing feedback on my artwork, none of this would happen. I get a lot of e-mail from you, and if you don't get a reply, please don't be insulted or think it isn't appreciated; that is not the case. I am just one guy who tries to do too many things all the time. At the end of the day, there are not enough hours to respond to every message. I do my best, but time always seems to escape me at some point.

Introduction

Putting things together

My discovery of Photoshop came after I worked as a graphic designer and art director for a few years. Back then, in the pre-desktop publishing days, we learned to put things together from different sources. Photostats, illustrations, and typesetting all got pasted onto boards to create press-ready artwork. I think that the idea of putting stuff together is something that has always stuck with me, regardless of what it is exactly that I'm using or where it came from.

People are often surprised to hear me, as a digital artist, say that the computer is place to create finished ideas, not to develop one or brainstorm. But for me that is true. The computer introduces constraints in terms of interaction and reduces the sense of freedom that is essential to effectively develop ideas, because you must also focus on the process of interacting with the machine to a degree that hinders. I have been a witness to, and actively involved in, the advent of the desktop computer as an essential tool for artists. One thing that I've noticed over the years is that the computer itself becomes something other than a tool; for many it becomes a comfort zone. More specifically, the actual software that artists master can often become a comfort zone. And when engrossed in a comfort zone, innovation and fresh ideas eventually dissipate. The process of creation within a comfort zone becomes routine, and the resulting work is uninspired. The fun gets sucked out of it, and it shows.

When I first started to use Photoshop, I was more than intrigued. I was hooked. I had found my medium as an artist. But after a while, I realized that being comfortable with the program was limiting in terms of staying fresh and developing new ideas. I began to explore other programs. I had been working with Illustrator prior to Photoshop and started bringing the two programs together to produce finished compositions. At the same time, I was very interested in Painter and a variety of 3D applications as they began to appear. I started playing around in different programs and was very excited to break out of my comfort zone. My work was becoming more experimental and inspired, and I was having much more fun with it. Then I noticed a common denominator. It was Photoshop.

Even though I was spending considerable time in other programs, I was always bouncing in and out of Photoshop. For 3D applications, I would make backgrounds in Photoshop ahead of time to align elements or to ensure perfect angles. Midway through the 3D process, I would find myself back in Photoshop, creating textures and displacement maps. Then, at the end of the 3D process, I would find myself opening the finished renderings in Photoshop, adjusting them, and using them to create something new once again. This process was not limited to 3D applications; it also proved true when I combined Photoshop with other programs such as Illustrator or Painter. Photoshop becomes the cornerstone application when working this way; it is essential at many points in the process. However, take note that this process of leaving Photoshop snaps you out of the Photoshop-only induced comfort zone, injecting some excitement into the tried-and-true process of putting things together.

Why write an entire book about this?

In the first edition of my previous book, *Creative Photoshop*, the last section contained a few chapters on the subject of using Photoshop with other programs. The general feeling was that although this discussion was interesting, it was out of place among the rest of the content and did not have enough pages allocated to it to address it properly. So, when I wrote the second edition of *Creative Photoshop*, I took that material out and replaced it with other content. It was Valerie Geary at Focal Press who suggested that the content that I removed was the beginning of another, completely different book. She was right. This book was quite a challenge to write, but now you have a few hundred pages on the topic at your disposal. Doing it in a smaller way would not do the subject justice. Trust me on this. I think the next edition will be even bigger.

Why Illustrator, Cinema 4D, Painter, Poser, and ZBrush?

If you are not determined or do not have much of an attention span, you might as well put this book down now. The content of each chapter is comprehensive and involved. That is because doing it any other way would sell you short. Every application used here is powerful and deserves a fair amount of depth when it comes to exploration and explanation. Each program is unique and, in my opinion, the best of its kind.

Illustrator is Photoshop's soul mate. They have played well together for many, many years, and they are constantly getting better at it. Most designers and illustrators use both applications daily. I decided that it was my duty to devote a substantial amount of space to doing extremely diverse and cool things by combining them. Hopefully I have introduced one or two ideas that you have never thought of before.

There is nothing else out there like Painter, so it was an obvious choice for the book. It is the only application in its class, as far as I'm concerned. In early versions of the program, I used it more or less on its own. However, these days it is built to work with Photoshop. Bouncing files back and forth is effortless, and there is a wonderful Photoshop familiarity about Painter's user interface.

ZBrush is another truly astounding piece of software. When I first caught wind of it, I figured that what I'd heard had to be lies. I was wrong. ZBrush delivers. This intuitive 3D sculpting program is one of a kind. If you have never explored it before, you are in for a treat. It takes the arduous process of working with 3D out of the equation via intuitive user interaction. Working with it really is like drawing or painting in 3D space.

Deciding on Cinema 4D was more of a challenge. This is not due to any shortcomings in the program, because I have found none. It is due to the fact that there are a lot of 3D programs out there, and I had to consider them all before settling on Cinema 4D. It is not the cheapest program out there, nor is it the most expensive. However, what I have found is that it is the easiest to learn in its class. And when I talk about its class, I am talking about powerful features, flexibility, modular architecture, and fantastic user interaction. I have worked with a number of 3D applications over the years, but I am sold on the fact that if you are a serious artist looking to get into the world of 3D and do something substantial, Cinema 4D is what you need. Also, its power runs deep, and you will likely never find a limitation to what you can create as you begin to master its various tools, features, and functions.

Poser was an obvious choice for me. When I think of 3D figures, I think of Poser. I have been using it since version 1.0 and am simply amazed at what it can create in terms of figures these days. And, like all the aforementioned programs, it is like a fine wine that simply becomes better with each incarnation.

Beginner, intermediate, or advanced?

I have always had a problem with the way that one's level of skill or capability as a digital artist has been limited to one of only three words. Obviously there are more than three variations in experience or mastery from user to user. However, these words are so ingrained in the collective subconscious that I find I must, at some point, address this topic by using them so people know what the hell I'm talking about.

Chances are, if you picked up this book one of the first things you wondered was whether or not you were capable of working through the material or whether you would be bored with it due to simplicity. I will do my best to set the record straight here. As a Photoshop user, I would say that at the very least you should consider yourself an intermediate user to effectively use this book. There is simply no room for me to tell you what a layer is or where to find the Brush tool or simple things like that. If you know your way around the program, you'll do just fine. That being said, advanced users will not find it so rudimentary that they will be bored. There is a hell of a lot going on in here.

Now, when it comes to the other programs, I have tried to work from the standpoint that the reader is a beginner. There is a good chance that you are using these other programs for the first time, so I instruct you in that way. I'll tell you a bit more about where things are or include more navigational screen grabs to help you around the interface. You can work your way through this book just fine, without ever having opened a different application than Photoshop. However, when it comes to Illustrator, I am assuming some knowledge pre-exists due to the fact that you are an intermediate Photoshop user. There are similarities between certain tools and the general interface of both programs, so you won't get as much handholding when it comes to Illustrator.

Every program used in this book comes with a Help menu function of some sort built into it. If you get stuck, don't hesitate to use it. After you've figured out what the holdback is and remedied it, continue to follow along where you left off.

Which version of which program do you need?

I wrote this book with core features, principles, and workflow methods in mind, and that pertains to everything, including Photoshop. I have never been an advocate of using the latest bells and whistles just because they're new. At the end of it all, you want to learn how to get the most out of each program, to help you realize your vision as an artist. Although I was using the most recent versions of each program at the time of writing, what I do from chapter to chapter is not necessarily version specific. If you are using downright archaic versions of programs, you might run into problems. But if you are remotely current on the version you're using, you should be able to make your way through with ease.

Do you have to buy all the programs to get through this book?

Absolutely not. As a matter of fact, I was very careful to select programs that have a demo version available for download. Every program used in the book has a trial version that can be downloaded from each company's Website. You will need to purchase nothing. Website links are provided in the opening spread for each chapter. Also, if you want to use just Photoshop, that is a possibility, too. If you are using Photoshop and nothing else, each chapter has a series of tips that will guide you through the process, and there are downloadable project files that will provide the assets created in other programs, so you can focus on the Photoshop-only portions. In most cases, this will get you to the finished stage. The only real exception is the Painter chapter. That particular chapter finishes off in Painter, so you won't wrap up in Photoshop like the other chapters. To remedy this for those of you using Photoshop only, I have included a layered file of the image I created for your perusal.

How to use this book

Each chapter in this book is a stand-alone project. One chapter does not lead into the next. You can literally open the book and start with any chapter that interests you. I have decided to follow the format

I used previously in *Creative Photoshop*. Each chapter begins with an inspirational image, and then a highly detailed, step-by-step walkthrough carries you through the process of how it was created. All the files you'll need to create each image are included in the downloadable project files for that chapter at www.beyondphotoshopthebook.com. At the end of each chapter, you'll not only create something compelling—you'll walk away with the knowhow required to apply these methods to work of your own. That is the real goal here: to inspire you as well as inform you, while at the same time creating something that is visually compelling.

Using a pressure-sensitive tablet

If you purchase one piece of equipment as a digital artist, make sure it is a pressure-sensitive tablet and stylus. Seriously, drawing and painting with a mouse are like entering a perpetual fight against your computer. For your own sake, buy a tablet. It doesn't have to be large or fancy, it just needs to be something more intuitive than a mouse. To prove my point, I used a Wacom Bamboo tablet for this entire book. It is small, limited, and inexpensive, but it does the job.

Further, I did not explore any pressure-sensitivity settings in Photoshop or other programs other than defaults. The point I'm trying to make is that success is about interacting with your machine in a natural way, and in my experience, getting a tablet is the best way to achieve this goal. If you want something larger or you want to explore pressure sensitivity, tilt, rotation, and so on, go ahead and do so. I just want you to know that using a tablet can be as simple as plugging it in and installing a driver, then forgetting about it—basking in the intuitive feel of it all as you begin to use it right away. Some chapters in this book will be possible to get through without a tablet: mainly the Illustrator, Poser, and Cinema 4D chapters. However, when it comes to using Painter and ZBrush, not using a tablet will almost certainly result in total frustration.

Expert tips

In addition to step-by-step instruction and inspirational imagery, you'll find hundreds of expert tips scattered throughout this book. Some of the tips pertain to the instructions on a particular page, but many are additional hints and pieces of advice, which will prove useful for almost anything you set out to do. Feel free to flip around the book and examine different tips, just as you would randomly flip from chapter to chapter. Tips are divided into five categories, represented by these icons:

Shortcuts
These time-saving tips will shave hours off your time spent working. Whether a keyboard command or a quicker way of doing something, these tips will allow you to spend more time creating rather than spending all your time executing certain tasks the long way.

Info
These tips contain useful tidbits and extra information that might not be addressed in the step-by-step instructions in each chapter. Or additional, more detailed information is provided to accompany a specific stage in the process.

Download files
These tips point you toward the specific files required to follow along. All project files are available for download in the project files section of the *Beyond Photoshop* Website.

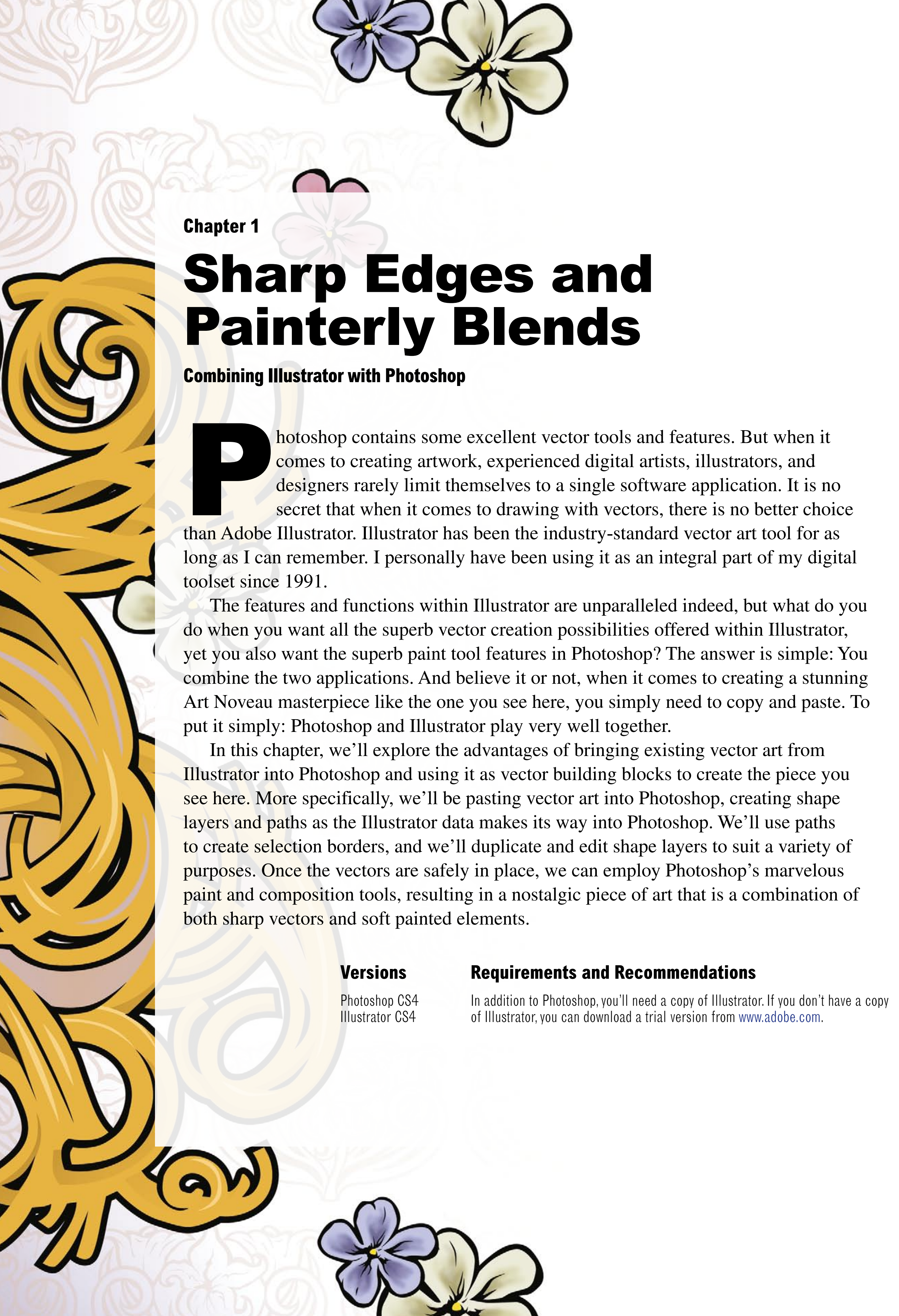
Caution
Be extremely careful when you see this tip. You are being warned of potential pitfalls and must carefully pay attention to prevent things from going horribly wrong.

Creative tips
Creative tips provide valuable hints and advice regarding the artistic process of creating with Photoshop. These touch on everything from unconventional tool usage within Photoshop itself to hints on how to extract resource materials from the physical world surrounding you.

Become part of the *Beyond Photoshop* community

Your exploration into combining Photoshop with other programs does not end with this book. Visit the *Beyond Photoshop* Website and explore the user forum. Share knowledge with and ask questions of other readers. Be sure to post your finished images in the user forum for everyone else to see. Submit the works you've created by following the chapters here, or post your own work, showcasing your new skills. Be sure to check it out.

Join the *Beyond Photoshop* community at www.beyondphotoshopthebook.com.



Chapter 1

Sharp Edges and Painterly Blends

Combining Illustrator with Photoshop

Photoshop contains some excellent vector tools and features. But when it comes to creating artwork, experienced digital artists, illustrators, and designers rarely limit themselves to a single software application. It is no secret that when it comes to drawing with vectors, there is no better choice than Adobe Illustrator. Illustrator has been the industry-standard vector art tool for as long as I can remember. I personally have been using it as an integral part of my digital toolset since 1991.

The features and functions within Illustrator are unparalleled indeed, but what do you do when you want all the superb vector creation possibilities offered within Illustrator, yet you also want the superb paint tool features in Photoshop? The answer is simple: You combine the two applications. And believe it or not, when it comes to creating a stunning Art Noveau masterpiece like the one you see here, you simply need to copy and paste. To put it simply: Photoshop and Illustrator play very well together.

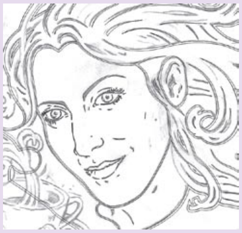
In this chapter, we'll explore the advantages of bringing existing vector art from Illustrator into Photoshop and using it as vector building blocks to create the piece you see here. More specifically, we'll be pasting vector art into Photoshop, creating shape layers and paths as the Illustrator data makes its way into Photoshop. We'll use paths to create selection borders, and we'll duplicate and edit shape layers to suit a variety of purposes. Once the vectors are safely in place, we can employ Photoshop's marvelous paint and composition tools, resulting in a nostalgic piece of art that is a combination of both sharp vectors and soft painted elements.

Versions	Requirements and Recommendations
Photoshop CS4 Illustrator CS4	In addition to Photoshop, you'll need a copy of Illustrator. If you don't have a copy of Illustrator, you can download a trial version from www.adobe.com.

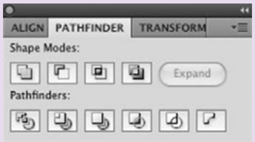
What you'll learn in this chapter

Creative Techniques and Working Methods

Constructing rather than outlining

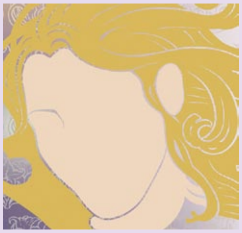


The artwork in this illustration relies heavily on prominent outlines. Generally, when I witness inexperienced users of Illustrator attempting to create artwork in a similar style, they rely on stroke attributes to create the outline in the image. An unfortunate result of this method is that there is little or no expressive quality in the line-work. What makes line-work expressive in the context of an illustration is the variation in thickness and the way the ends of each line taper, are sharp, or are rounded. Granted, there are options within the Stroke palette that allow you to change the endpoints of the line; but again, like the uniform thickness of the stroke, those just aren't expressive enough. The best way to achieve the desired expressive quality is to pay attention to the sketch.



When we draw, something intuitive happens, and it becomes effortless or even a subconscious act to create expressive line-work. Within software it is a different story. We need to focus on preserving the innate, expressive quality of our drawing as we create the finished product. This goal cannot be achieved by using stroke attributes but by creating each element manually with the Pen tool. However, there is more to it than simple mastery over the Pen tool. There is a logical method of construction, which involves creating an exterior shape first. The next step is to subtract an interior. This will give you your expressive outline. After that, details are created as closed shapes, and the result is unified. The Pathfinder palette plays a central role in this systematic drawing process.

Deconstructing and inverting



When you paste your illustrated outlines into Photoshop, they will serve another purpose. By working with duplicates of the shapes, you will learn how to remove the outer regions, thus inverting the appearance of the fill. This might sound confusing, but it is a simple process that we'll go through repeatedly. It allows you to use your illustrations not only as outlines but also for creating instant solid color fills on separate layers.

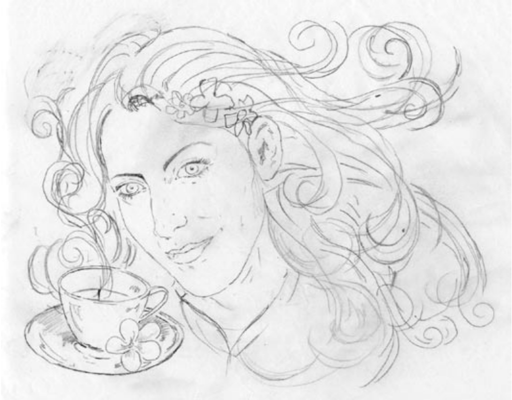
Tools, Features, and Functions

Template layers

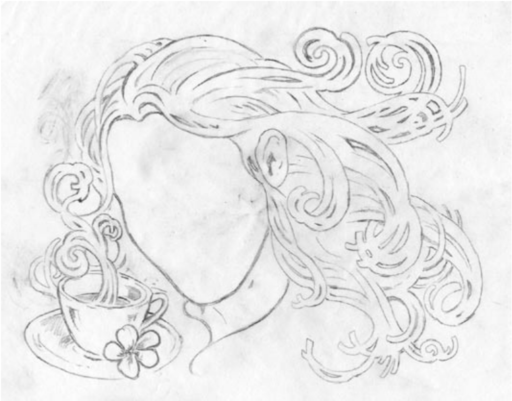
These Illustrator layers will allow you to fade the opacity of your sketch so that you can trace over it without visual distraction. Also, and perhaps more important, the imagery on the Template layer will remain visible in both Preview and Outline modes.

Outline Stroke

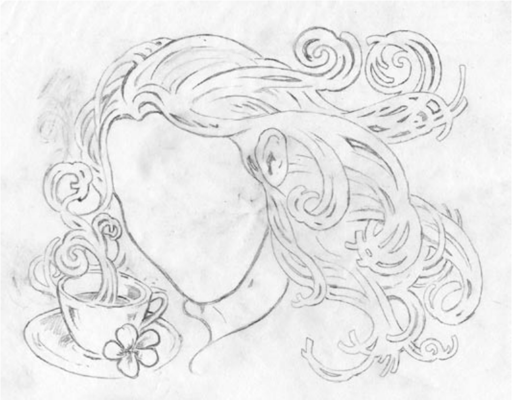
This nifty feature allows you to convert Illustrator's stroke attribute to an actual, editable vector object. This is helpful when you're pasting something into Photoshop. Not only do you preserve the stroke, but by converting it to an object, you can delete the exterior path on your resulting shape layer to invert the appearance as well.

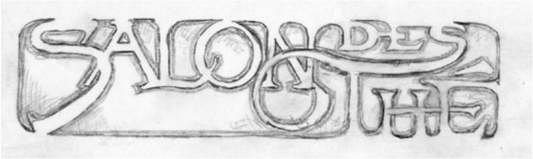


An intricate illustration like this one requires quite a bit of prior planning. There is no better start than putting pencil to paper and sketching out those ideas. Here the main content is more or less worked out. Her face is looking good, but everything else requires some more refining.



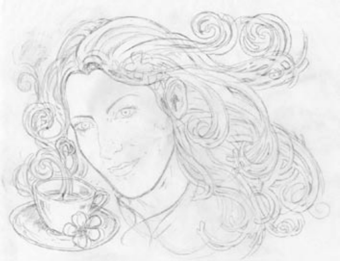
Because the face itself was working already, I simply refined the other elements in this drawing. Don't fret because there is no face shown here; we'll make a composite template soon by combing the two drawings in Photoshop.

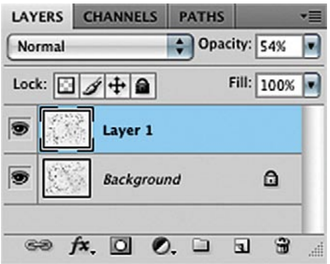




It is always a good idea to keep the components separate, even at the drawing stage. This allows you to digitally refine each component separately, affording you some flexibility when it comes time to assemble the finished composition.

PART ONE: Preparing sketches



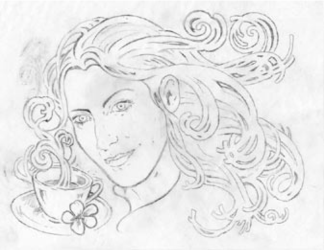

LAYERS
CHANNELS
PATHS
Lock:

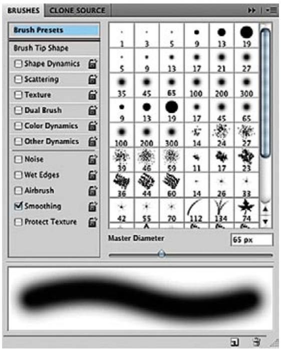
Normal
Opacity: 54%
Fill: 100%
Layer 1
Background

1 Open the *sketch-1.jpg* file in Photoshop. Then open the *sketch-2.jpg* file. Use the Move tool to drag the image from the *sketch-2.jpg* file into the *sketch1.jpg* file as a new layer. Reduce the opacity of the layer so that you see the underlying layer. Use the underlying layer as a guide to position the top layer as accurately as possible. The important thing to concentrate on at this point is lining up her facial features within the outline of her face.

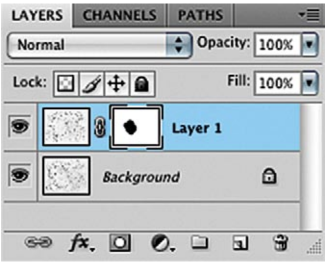
Project files

All the files needed to follow along with this chapter and create the featured image are available for download on the accompanying Website, in the project files section. Visit www.beyondphotoshopthebook.com.



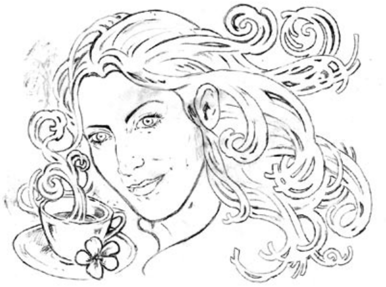

BRUSHES
CLONE SOURCE
Brush Presets
Brush Tip Shape
Shape Dynamics
Scattering
Texture
Dual Brush
Color Dynamics
Other Dynamics
Noise
Wet Edges
Airbrush
Smoothing
Protect Texture
Master Diameter

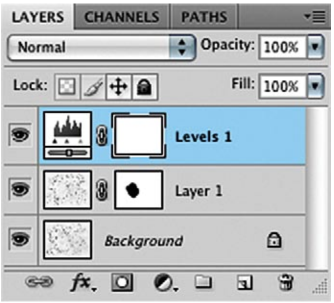
☑ Smoothing
Master Diameter 65 px


LAYERS
CHANNELS
PATHS
Lock:

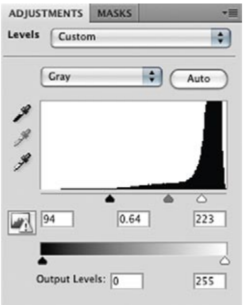
Normal
Opacity: 100%
Fill: 100%
Layer 1
Background

2 When you're satisfied with the position of the top layer, click the Add Layer Mask button at the bottom of the Layers palette to mask the layer. Ensure that the new mask is targeted in the Layers palette and select the Brush tool. In the Brushes palette, select a soft, round preset and disable any shape dynamics that are active. Your foreground color should be set to black at this point; if it isn't, press the X key to set it. Paint over her face area within the mask to reveal the underlying face. When you're satisfied with the result, return the opacity of the layer to 100%.





Normal Opacity: 100%
Fill: 100%
Levels 1
Layer 1
Background

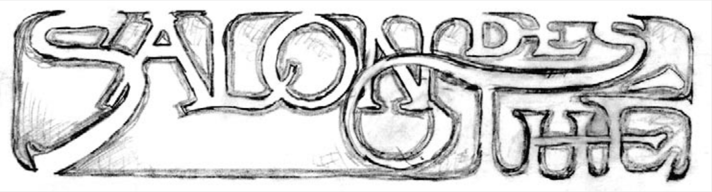


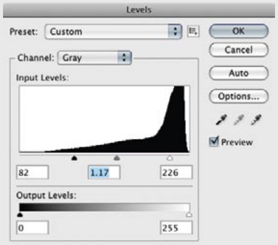
Levels Custom
Gray
94 0.64 223
Output Levels: 0 255

3 Click the Create New Fill or Adjustment Layer button at the bottom of the Layers palette and select the Levels option from the menu to create a new Levels adjustment layer. In the Adjustments palette, drag the left and right input level sliders inward. Drag the left slider over a little further, and then drag the middle slider to the right a little. Basically, our goal is to create a sense of clarity in the image. Don't worry if there are still some unwanted artifacts; we'll simply use this as a template in Illustrator. Save the file as *face template.psd*.

Repeat the process

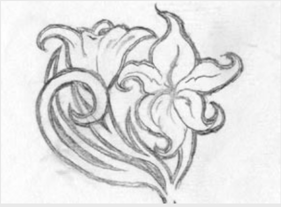
Perform similar adjustments to the two remaining sketches, creating a series of clear templates for Illustrator.

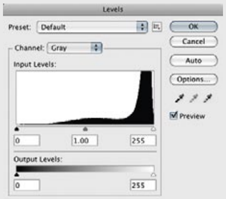




Preset: Custom
Channel: Gray
Input Levels: 82 1.17 226
Output Levels: 0 255

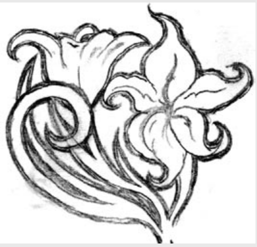
1 Now open the *sketch-3.jpg* file. Press Control-L (PC)/Command-L (Mac) to perform a Levels adjustment. When the Levels dialog box appears, drag the left and right input level sliders inward to increase the contrast. Adjust the midtones slider as necessary to minimize the midtones in the drawing.

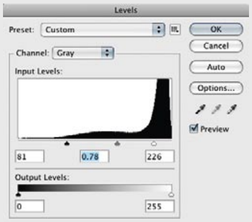




Preset: Default
Channel: Gray
Input Levels: 0 1.00 255
Output Levels: 0 255

2 Save the file as *words template.psd.* Then open the *sketch-4.psd* file. You can tell just by looking at the image that you'll need to increase the contrast overall to create a clear template to trace over in Illustrator. Press Control-L (PC)/Command-L (Mac) to open the Levels adjustment dialog box.

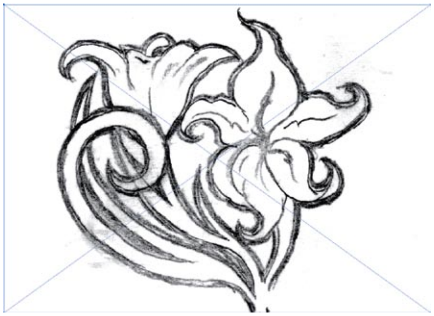


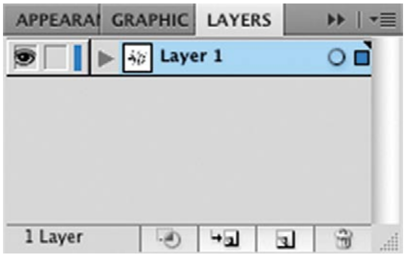


Preset: Custom
Channel: Gray
Input Levels: 81 0.78 226
Output Levels: 0 255

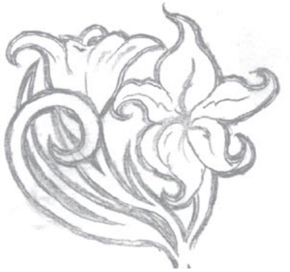
3 Perform a similar adjustment to the input level sliders as you've done previously. First, drag the left and right sliders inward, then adjust the midtones. When you're satisfied, save this file as *flower template.psd*.

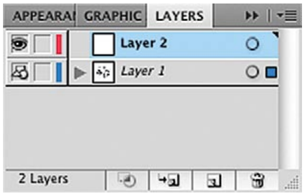
PART TWO: Creating a pattern

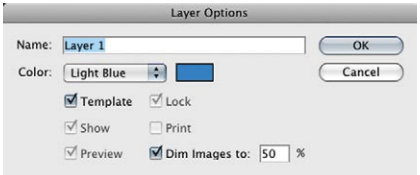




4 Launch Illustrator and create a new file. The size of the artboard is unimportant since we're simply going to paste the completed art into Photoshop. You can leave the artboard size set to the default setting. Don't worry about the document's color space, either. Choose File > Place from the menu and navigate to the *flower template.psd* file. Click the Place button. When the placed artwork appears, Shift-click and drag a corner point outward to increase the size so that you have a larger space to work within.







Layer Options

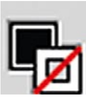
Name: Layer 1

Color: Light Blue

☑ Template ☑ Lock

☑ Show ☐ Print

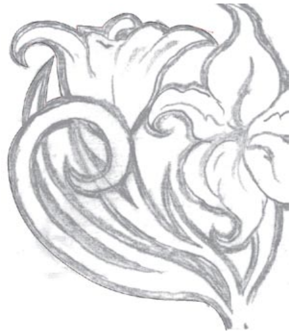
☑ Preview ☑ Dim Images to: 50 %

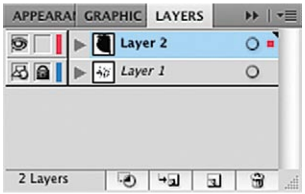


5 In the Layers palette, double-click the layer to open the Layer Options. In the Layer Options, enable the Template function. This will hide all other options except the Dim option. By default, the Dim setting will be set to 50%. Go ahead and leave it set as it is. If you ever want to change the dimness of the image, you can simply double-click the layer and reset the value. Select the Pen tool and then click the Fill swatch in the Toolbar. When the Color palette appears, set the fill to Black. Then click the Stroke swatch in the Tool Options bar and set it to None in the Color palette or by clicking the None option beneath it in the Toolbar. You cannot draw on a template layer, so click the Create New Layer button at the bottom of the Layers palette to create a layer that you can work on. Ensure that the new layer is targeted in the Layers palette.

Illustrator files and workaround

If you want to follow along with this chapter yet you find the idea of creating art in Illustrator daunting, worry not. All the Illustrator files that are created throughout this chapter are included in the downloadable project files. So, if you don't feel like meticulously creating the vector components, they are there for your perusal should you decide to open them in Illustrator. And for those of you who don't want to so much as open Illustrator, we've included a file called *working.psd* that contains all the art pasted from Illustrator throughout this chapter. Following along using that file is simply a matter of enabling the visibility of the included shape layers and generating selections from included paths as necessary.

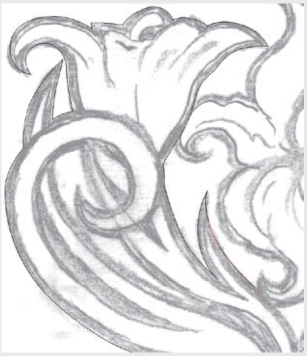




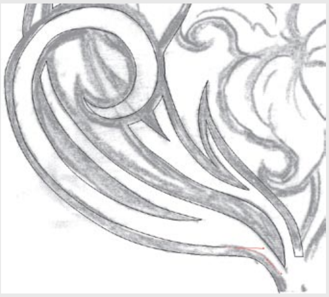
6 Use the Pen tool to begin tracing the outer left edge of the shape. Start at the bottom and work your way upward, clicking and dragging as you go, to create a path made of Bezier curves that follows the edge of the sketch. At any point you can alter a point or the handles of a curve by using the Direct Selection tool. After editing a point, continuing from the last point is as simple as clicking and dragging on the point and then creating the next point, and so on. You might find that because the object has a solid black fill attribute applied to it, it is hard to view the underlying sketch as you work. To remedy this problem, switch to Outline viewing mode by typing Control-Y (or Command-Y). You can switch back to Preview viewing mode at any time by typing the same command.

Tracing the sketch

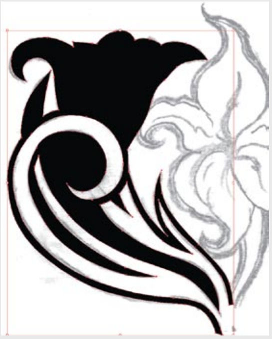
Using the underlying template as your guide, begin to trace the contour, creating your first closed shape.



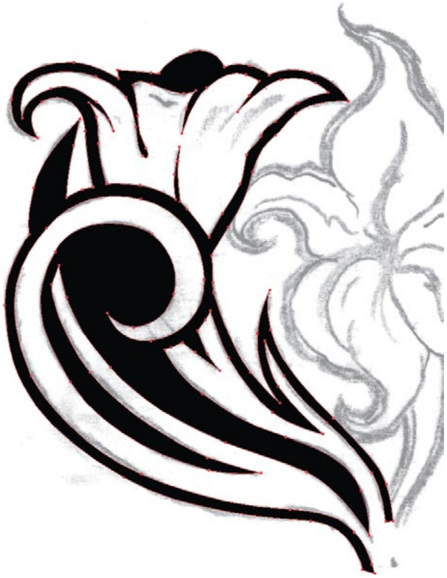
1 When you get to the top, continue along toward the right. When you get to the top-right point of the first flower, move down the right side of this flower, tracing it. Do not worry about the other flower just yet; simply keep creating your path down the right side of the first flower.

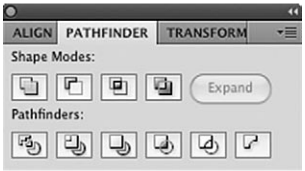


2 When you get to the part where the line on the sketch intersects with the other flower, continue to draw your path by moving to the left and then tracing the inner edge. Continue to trace the inner edge as it moves up and down and meanders along. Do not cross over any thick, black lines. Just trace this inner line all the way back to your original starting point.

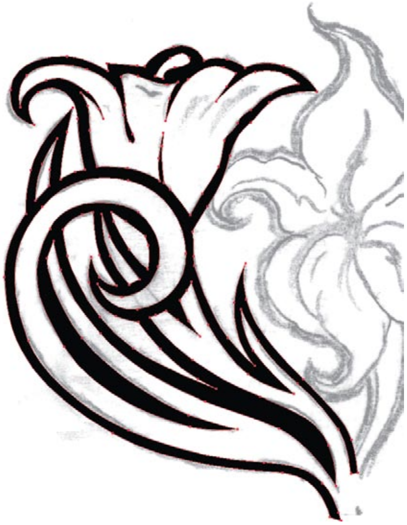


3 When you get back to your original point, click it to close the shape. Now that the shape is closed, press Control-Y (or Command-Y) to preview it. While you are previewing it, perform any necessary tweaks to the shape with the Direct Selection tool, creating smooth curves.





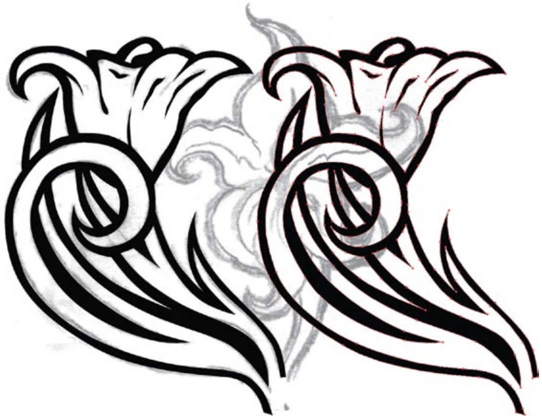
7 Press Control-Y (or Command-Y) again to switch to outline view. You will have noticed by now that in some areas the design looks outlined, as it was intended. However, regions at the top are solid black. To remedy this situation, the next step is to use some shapes to, one by one, subtract from these regions. Use the same methods you employed previously to draw a closed shape around the inner region of the flower's petals at the top. When you're finished, select the new shape with the Selection tool, and then select the previous shape as well by Shift-clicking on it. While both shapes are selected, click the Minus Front button in the Shape Modes section of the Pathfinder palette. This will subtract the new shape from the previous shape. Press Control-Y (or Command-Y) to preview the result.

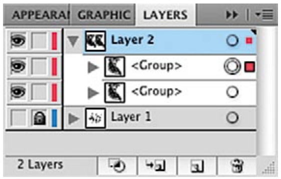


8 Press Control-Y (or Command-Y) to switch back to outline view. Draw another one of the shapes that you need to subtract from the solid black area. When you have closed the shape, select it and select the main shape with the selection tool. When both shapes are selected, perform the Minus Front operation in the pathfinder once again. Repeat this procedure as many times as required to stay true to the original drawing. Feel free to use the Direct Selection tool to modify points or Bezier handles at any point to refine the shape.

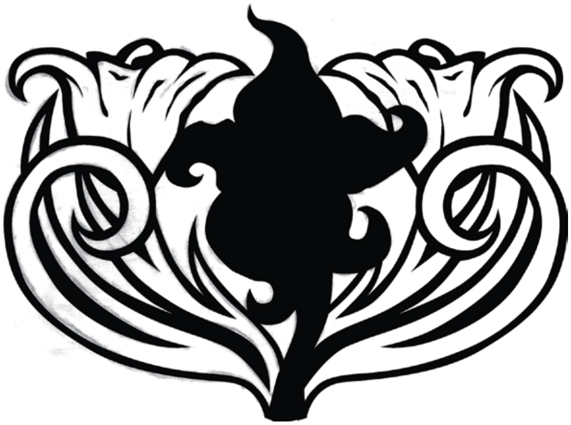
Why doesn't it work?

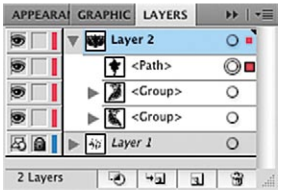
If your Minus Front operations are producing unwanted or unpredictable results, you could be doing a few things incorrectly. First, ensure that you use the Selection tool rather than the Direct Selection tool. You need to select objects, not line segments or points. Also, ensure that the shape you're using as a tool resides above the shape you're subtracting from. You can check this in the hierarchy of the Layers palette. Finally, subtract only one shape at a time. If you select three shapes and perform the Minus Front operation, it will not work properly.





9 The only things missing from this side of the flower now are the small, black details. Carefully draw a series of closed objects to represent the missing details indicated by the underlying sketch. When you're finished, press Control-A (or Command-A) to select all the objects, and then press Control-G (or Command-G) to group them. Use the Selection tool to click the group and drag it to the right while holding down the Alt (PC)/Option (Mac) key to duplicate it.

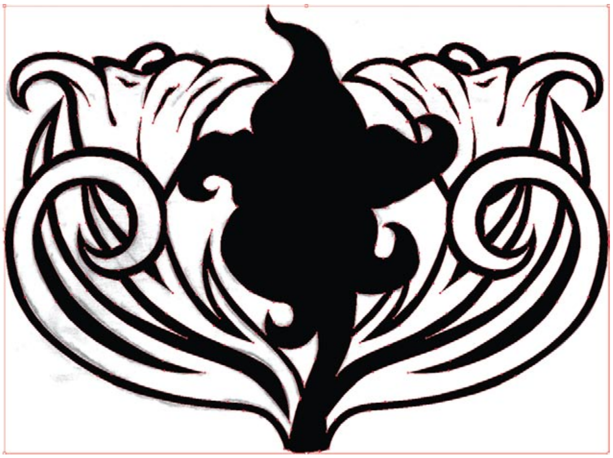


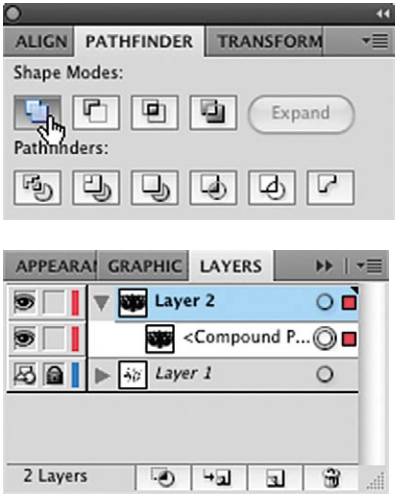


10 While the duplicate group is selected, choose Object > Transform > Reflect from the menu. When the Reflect options appear, choose the Horizontal axis and click OK. After reflecting, Shift-drag to the right or left to adjust the horizontal position of the duplicate so that both groups are overlapping slightly in the middle. Now use the Pen tool to draw a closed shape that traces the outer edge of the central flower. Trace the entire flower and close the shape by clicking the original starting point when you've made your way back to it. It is important to bear in mind that we are using the sketch as a guide and, as is evident in the duplication procedure we just performed, alterations and/or improvements can be performed at your discretion. Never be afraid to clean up your art as you go.

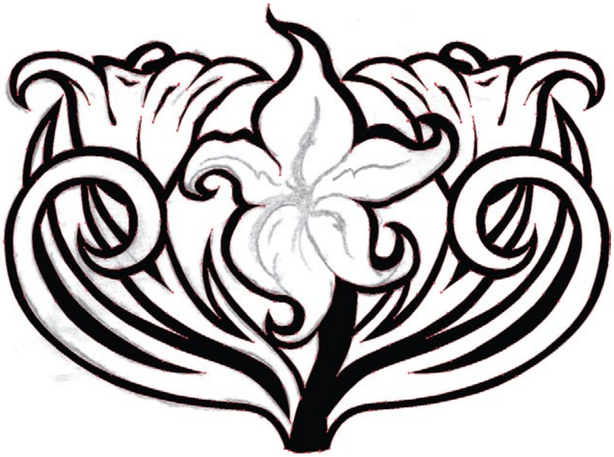
Alphonse Mucha

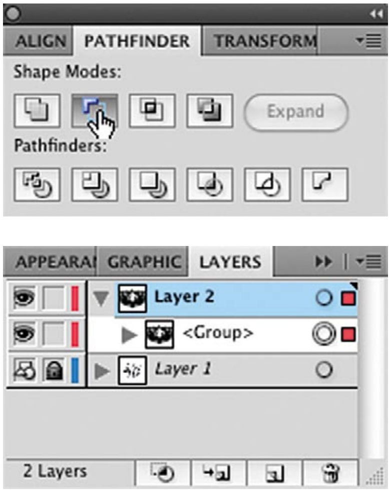
The work of the Czechoslovakian painter and illustrator Alphonse Mucha was my inspiration for this chapter's opening illustration. His work frequently featured women in flowing robes with lavish and flowing hair surrounded by flowers. I borrowed the style of my illustration's hair, as well as the hand-rendered typography and flowers, from his work. Mucha was one of a kind, and if you like the gentle, flowing quality of my illustration, you should investigate the work of the real master at www.muchafoundation.org.



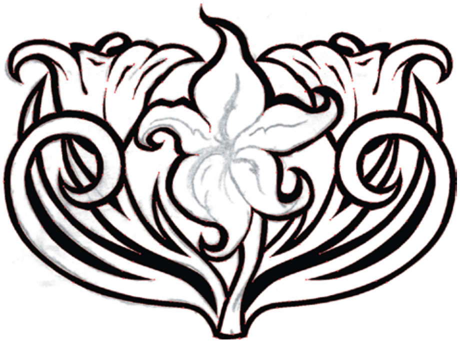

ALIGN
PATHFINDER
TRANSFORM
Shape Modes:
Expand
Pathfinders:
APPEARAI
GRAPHIC
LAYERS
Layer 2
<Compound P...
Layer 1
2 Layers

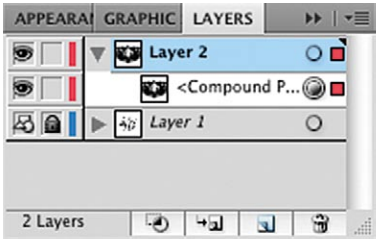
11 Press Control-A (or Command-A) to select all the objects on the artboard, and then click the Unite button in the Shape Modes section of the Pathfinder palette. After the shapes are united, you'll notice that as a result a new group appears in the Layers palette. While the resulting shape is still selected, choose Object > Compound Path > Make from the menu. You'll see the group change to a compound shape in the Layers palette, but there will be no visible change on the artboard. Converting the group to a compound path is essential for future Pathfinder operations to work properly.



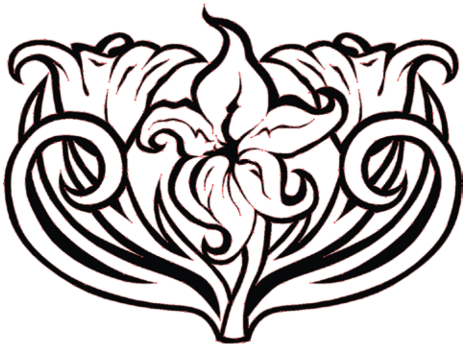

ALIGN
PATHFINDER
TRANSFORM
Shape Modes:
Expand
Pathfinders:
APPEARAI
GRAPHIC
LAYERS
Layer 2
<Group>
Layer 1
2 Layers

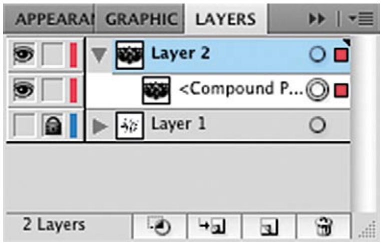
12 After you convert the group to a compound path, press Control-Y (or Command-Y) to switch to Outline mode if you're currently working in Preview mode. You'll need to switch to Outline mode to see the underlying sketch. Use the Pen tool to create a shape that that traces the inside of the flower petals outline as indicated by the sketch. Again, take your time and work your way around the entire interior of the petals only until you return to the starting point. Don't worry about the stem yet; we'll do that next. Return to the starting point to close the shape. Press Control-A (or Command-A) to select all, then click the Minus Front button in the Pathfinder palette. Switch back to Preview mode to view the result.





13 Again, you'll notice the result appear as a group in the Layers palette. While the new group is selected, choose Object > Compound Path > Make from the menu. After converting the group to a compound path, return to Outline mode so that you can clearly see the underlying sketch on the template layer. Use the Pen tool to create a closed shape that traces the interior of the stem. Toggle back and forth between Preview and Outline modes as necessary to both see what you're doing and to view the results accurately. When you have closed the shape, press Control-A (or Command-A) to select all, and then click the Minus Front button in the Pathfinder palette. Again, convert the resulting group to a compound path.

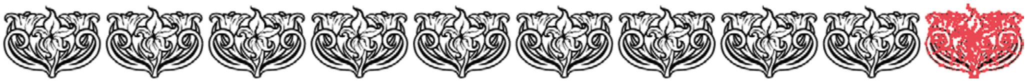


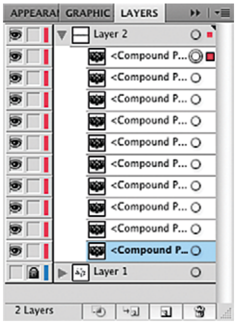


14 Use the Pen tool to create a series of closed shapes indicated by the petal details on the underlying sketch. When you're finished, select all and click the Unite button in the Pathfinder to unite all the shapes. While the new group of shapes is selected, convert it to a compound path, as you've done previously. When you're finished, disable the visibility of the template layer by clicking its Visibility icon in the left column of the Layers palette.

Illustrator workaround 1

If you want to inspect or use the finished pattern file that was used here rather than create your own, it is included within the downloadable project files for this chapter. The name of the file is *pattern.ai*.




APPEARA
GRAPHIC
LAYERS
Layer 2
<Compound P...
<Compound P...
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<Compound P...
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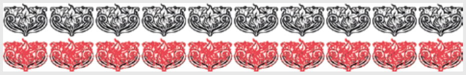
Layer 1
2 Layers

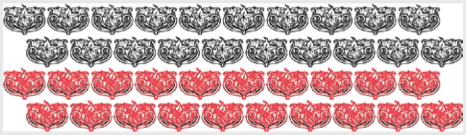
15 Zoom out considerably and use the Pan tool to position your artwork in the upper-left corner of the window. Use the Selection tool to select the compound path if it isn't already. Click it and then drag to the right while holding down the Alt (or Option) and Shift keys. This will create a duplicate that is vertically aligned with the original shape. Leave the duplicate shape selected and then press Control-D (or Command-D) to implement the Transform Again operation. This will create another instance of your shape, moving it the exact same distance as you did previously. Keep typing the same keyboard command until you've created a row of 10 shapes.

Finishing the pattern

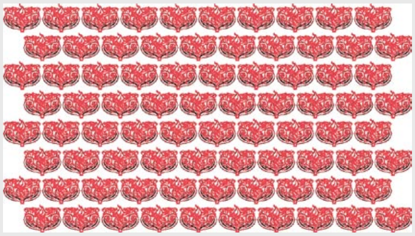
Duplicate, offset, and duplicate until you complete the pattern in Illustrator.



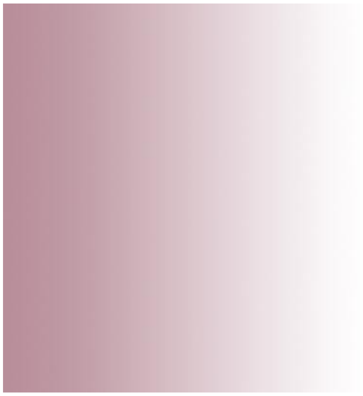
1 After creating a horizontal row, press Control-A (or Command-A) to select them all. Then click any shape with the Selection tool and drag downward while holding down the Alt (or Option) key to create a duplicate row.

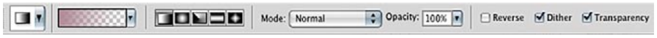


2 Hold down the Shift key as you drag the row to the right or left to offset it. Then press Control-A (or Command-A) to select all. After selecting everything, click any shape with the Selection tool and drag it downward while holding down the Alt (or Option) and Shift keys.



3 While the two duplicated rows are selected, press Control-D (or Command-D) twice. This will implement the Transform Again operation twice, resulting in eight rows. Press Control-A (or Command-A) to select all, and then press Control-C (or Command-C) to copy.



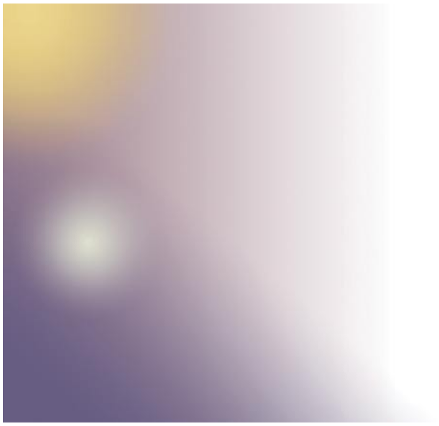


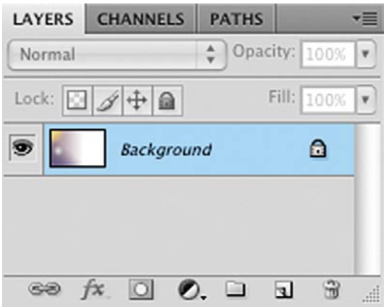
Mode: Normal Opacity: 100% ☐ Reverse ☑ Dither ☑ Transparency

16 Launch Photoshop and create a new RGB file that is approximately 18 inches wide and 12 inches high. Set the background contents to white. Select the Gradient tool. In the Tool Options bar, choose the Linear gradient method and the Foreground to Transparent gradient preset. Click the foreground color swatch in the Toolbar to open the picker. Select a purple color from the picker and create a gradient on the background layer by clicking the left side of the canvas and dragging to the right.

Illustrator preferences

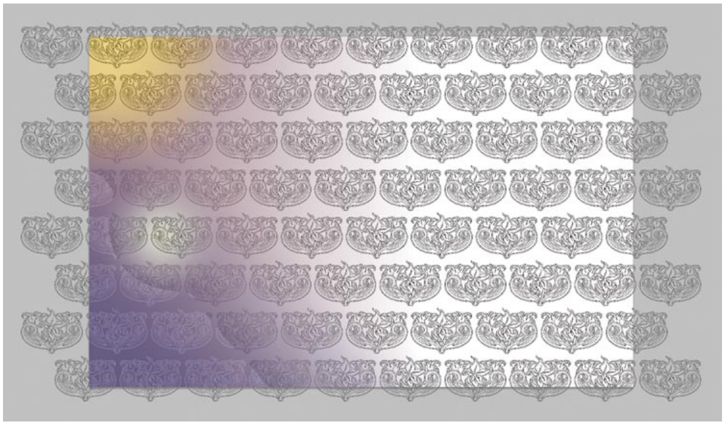
To have the full gamut of options available to you when you paste your Illustrator art into Photoshop, it is necessary that your Illustrator preferences are set up properly before you copy. In the file handling and clipboard preferences, ensure that the PDF and AICB options are enabled. If these options are not enabled, your art will be automatically rasterized when you paste it into Photoshop.

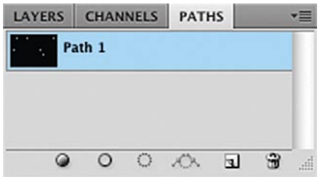




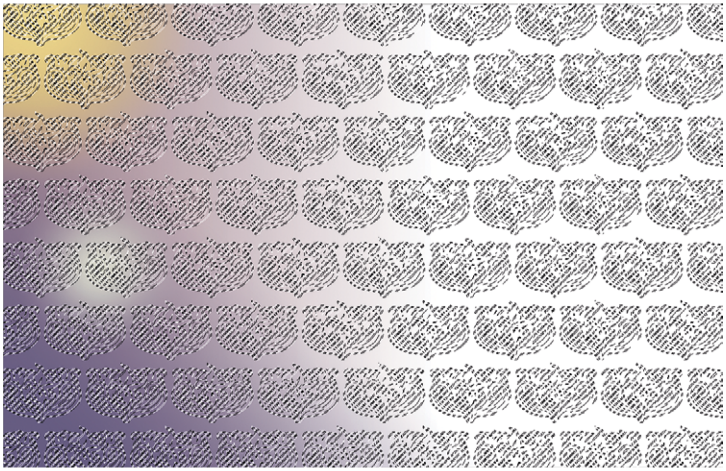
Normal Opacity: 100%
Fill: 100%
Background

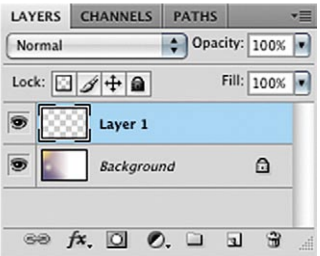
17 In the Tool Options bar, switch the gradient method to Radial. Leave the Gradient preset set to Foreground to Transparent. Now click the foreground color swatch in the Toolbar and select a yellow color from the picker. Create a large radial gradient in the upper left of the canvas area. Next, choose a darker purple foreground color and create a new gradient in the lower left. Finally, choose a very light yellow foreground color and create a smaller gradient in the area between the other two.





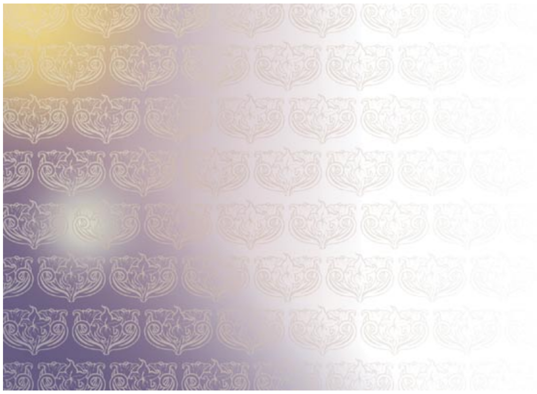
18 Press Control-V (or Command-V) to paste your copied art from Illustrator into the Photoshop file. When the Paste As options appear, choose the Path option. The artwork will be immense compared to your canvas. To remedy this problem, begin by pressing the F key as many times as necessary until the designated view switches to full Screen Mode With Menu Bar. Next, zoom out considerably until you can see the edges of the pasted artwork. Press Control-T (or Command-T) to enable the Free Transform operation. When the bounding box appears, click a corner point and drag inward while holding down the Alt (or Option) and Shift keys until the pattern is drastically reduced. Press the Enter key to apply the transformation.

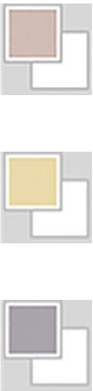




Normal
Opacity: 100%
Fill: 100%

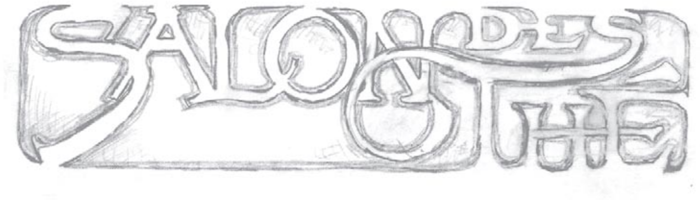
19 Ensure that you name this path in the path's palette or it will be in danger of being overwritten. Do not leave it named *work path*. If you simply double-click the path's name and then leave it set to *Path 1*, that is fine. Do this each time you add a path. Control-click (or Command-click) the path thumbnail to load it as a selection. Because it is quite intricate, it will likely take a moment for the selection to load. When the selection marquee appears, return to the Layers palette. Click the Create A New Layer button at the bottom of the Layers palette. Target the new layer.

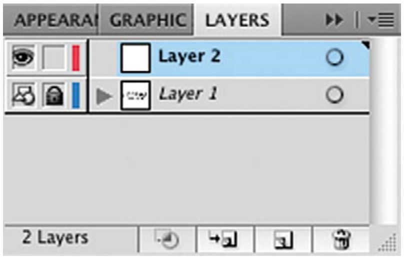




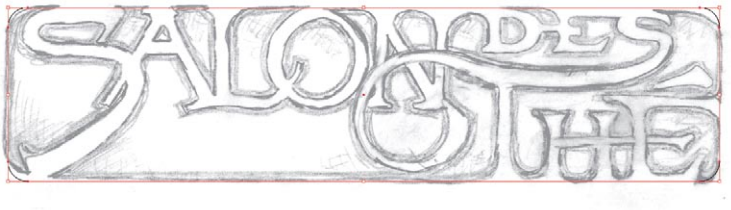
20 Select the Gradient tool. It should still be set to the Foreground to Transparent preset. Choose the Linear method and then click the foreground color swatch in the Toolbar. When the picker appears, choose a dirty pink color and click OK. Click and drag from the left edge of the canvas to the right, filling the active selection with a gradient on the new layer. Switch to the Radial method in the Tool Options bar and then create a couple of new gradients within the selection, from the top- and bottom-left corners, moving toward the center of the canvas. Use a mauve foreground color at the bottom and a yellow color at the top. Press Control-D (or Command-D) to deactivate the selection.

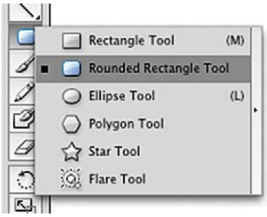
PART THREE: Creating the text



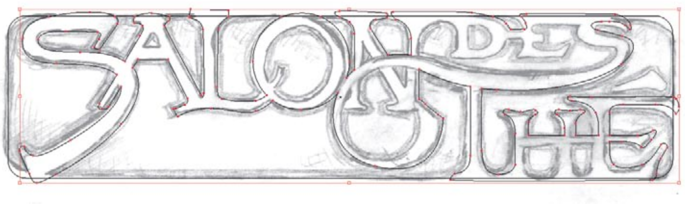


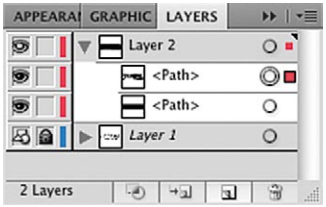
21 Return to Illustrator and create a new file. As before, the artboard size does not matter. Simply hide the artboard from view after you create the document. Choose File > Place from the menu and select the *words template.psd* file you created earlier. Click the Place button and then double-click the layer in the Layers palette. Choose the Template option from the Layer options and click OK. Click the Create New Layer Button at the bottom of the Layers palette and ensure that the new layer is targeted.





22 Click and hold the Rectangle tool in the Toolbar and then select the Rounded Rectangle tool when it appears. If your fill color is not set to Black, go ahead and change it in the Color palette. Also ensure that that the stroke attribute is set to None. Click and drag to create a new rounded rectangle about the same size as the one shown in the underlying template layer. This will define the perimeter of the text box. Press Control-Y (or Command-Y) to switch to Outline view if you are currently working in Preview mode so that you can see the underlying sketch.

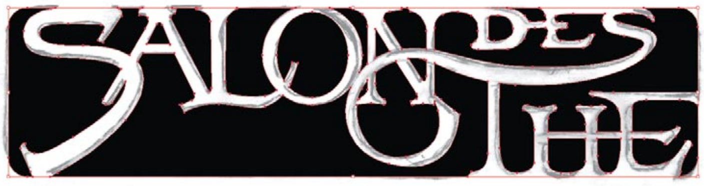


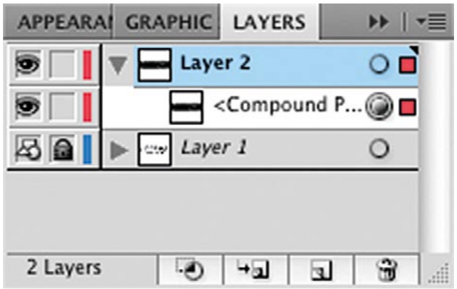


23 Use the Pen tool to carefully trace the outer line of the lettering. Concentrate only on the exterior of the letters at this point and ensure that this outer form creates a single, closed shape. This part is time consuming and requires quite a bit of patience, so relax and take your time here. It will be necessary to extend beyond the edge of the rectangle in some regions just to continue the shape. Don't worry about how the lines that extend beyond the edge of the rectangle look; they will be removed at the next stage in the process.

Editing rounded corners

When you create a rounded rectangle, you might think that the corners are either too round or perhaps not round enough. If this is the case, delete the rectangle, then either click once or Alt-click (or Option-click) on the artboard. The rounded rectangle options will appear. Leave the width and height settings as they were so that the new rectangle will be the exact same size as the previous one. However, increase or decrease the corner radius amount as you see fit. Click OK and a new, revised, rounded rectangle will appear.

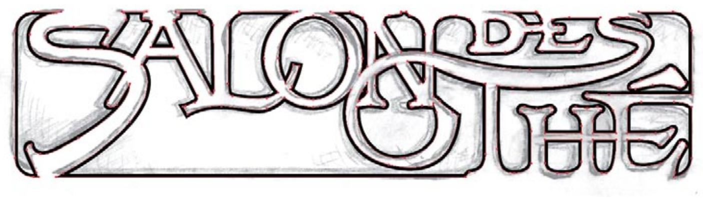


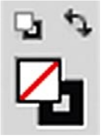


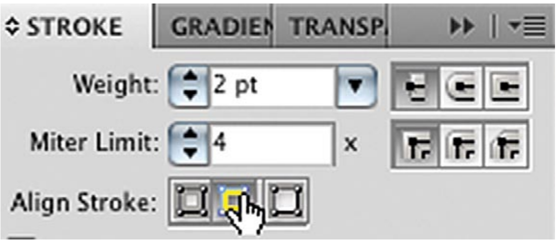
Layer 2
<Compound P...
Layer 1

2 Layers

24 Press Control-A (or Command-A) to select the new shape as well as the underlying rounded rectangle. When both are selected, click the Minus Front operation in the Pathfinder palette to punch a hole in the rectangle using the new shape. View the results in Preview mode. While the resulting group is selected, choose Object > Compound Path > Make from the menu. Now use the Pen tool to carefully trace all the missing components as indicated by the sketch—things like the inside of the letter *o*, the inside of the letter *a*, and so on. Again, take your time as you draw all these little bits and pieces. It is important that they match the quality of your existing compound path. When you're finished, select all and then click the Unite button in the Pathfinder palette. After that, convert the resulting group to a compound path.

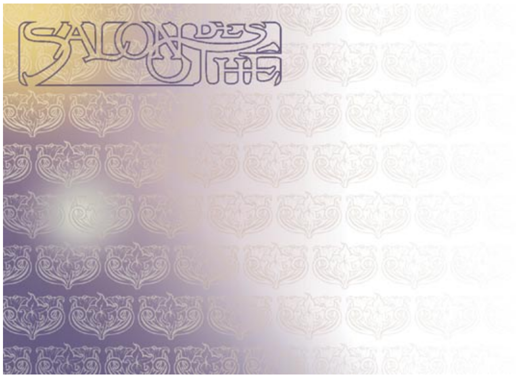


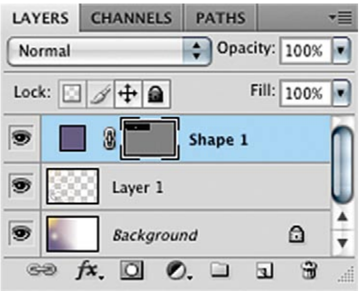




Weight: 2 pt
Miter Limit: 4 x
Align Stroke:

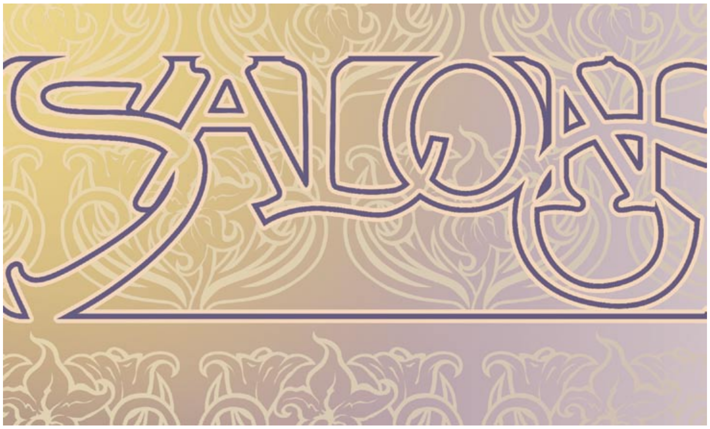
25 Switch to Outline mode and use the Pen tool to create a closed shape for the accent over the *e* in *the*. Select all and click the Minus Front button in the Pathfinder palette. Convert the result to a compound path. While the compound path is selected, click the small icon in the Toolbar that toggles the fill and stroke attributes to invert them. In the Stroke palette, choose the Align Stroke To Inside option and increase the weight to 2 points.

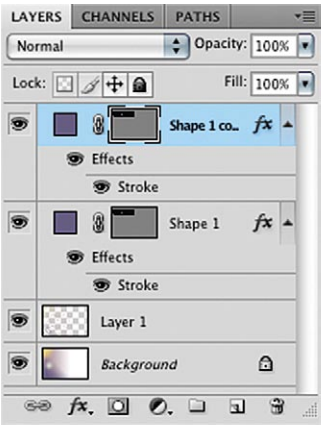




Normal
Opacity: 100%
Lock:
Fill: 100%
Shape 1
Layer 1
Background

26 Choose Object > Path > Outline Stroke from the menu. This will convert the stroke attribute to an object. Select all and copy. Return to your working file in Photoshop and paste. When the Paste options appear, select the Shape Layer option and click OK. When the shape layer appears on the canvas, press Control-T (or Command-T) to access Free Transform. Shift-drag a corner point outward to increase the size of the shape and position it at the upper left of the canvas. Press the Enter key to apply the transformation. Your shape layer will use the current foreground color as its fill color. To change the color, double-click the Shape Layer thumbnail in the Layers palette. When the picker appears, choose a brighter purple color and click OK.



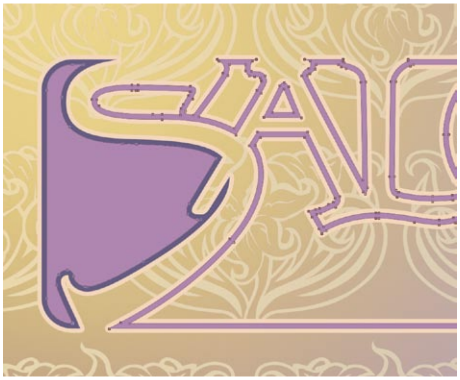


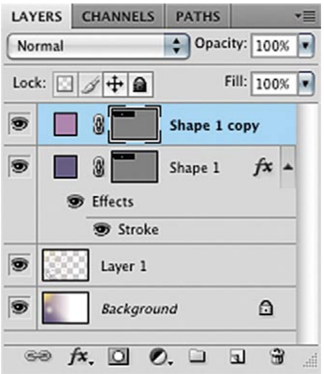
Normal
Opacity: 100%
Lock:
Fill: 100%
Shape 1 co...
Effects
Stroke
Shape 1
Effects
Stroke
Layer 1
Background

Illustrator workaround 2

Again, if you are not inclined to draw the text components yourself or if you simply want to inspect the actual file used here, it is included within the downloadable project files for this chapter. The file is called *words.ai*.

27 Ensure that your shape layer is targeted in the Layers palette, and then choose the Stroke option from the Layer Styles menu at the bottom of the Layers palette. In the Layer style options, enable the Preview option, if it isn't already enabled, and adjust the size of the stroke so that it is about as wide as the purple stroke of the shape layer itself. Set the Position option to Outside. Click the Color swatch and choose a light peach color from the picker. Duplicate the layer by dragging it onto the Create A New Layer button at the bottom of the Layers palette.





LAYERS CHANNELS PATHS

Normal Opacity: 100%

Lock: Fill: 100%

Shape 1 copy

Shape 1 *fx*

Effects

Stroke

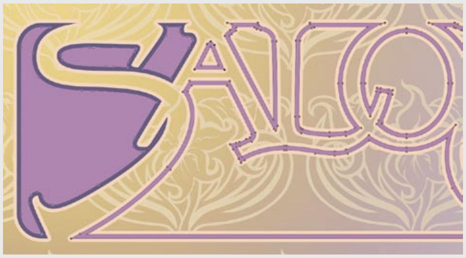
Layer 1

Background

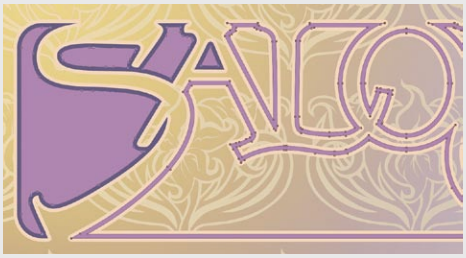
28 Click the Stroke effect applied to your duplicate layer and drag it to the trash at the bottom of the Layers palette to remove it. Double-click the Duplicate Shape layer's thumbnail to access the picker and change its color to a lighter purple. Choose the Direct Selection tool from the toolbar. Hold down the Alt (or Option) key and click the outer path on the left side of the shape layer. This will select the outer path only, leaving the inner path untouched. Press the Delete key. As the outer path is removed, the fill is inverted, filling the inner path.

Inverting the shape layer

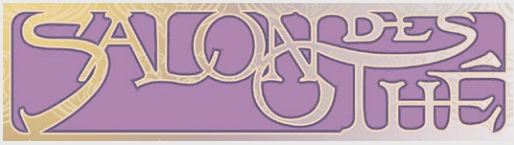
Removing the outer paths will cause a drastic change in the layer's shape area operations.



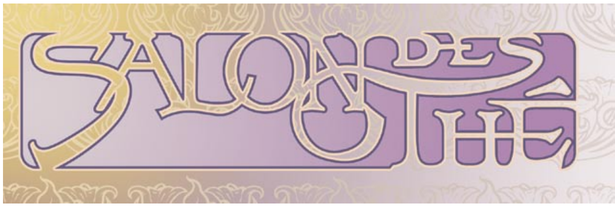
1 Alt-click (or Option-click) on the outer path of the shape to the upper right of the *s* with the Direct Selection tool. Again, when the outer path is selected, delete it. It is very important to hold down the Alt (or Option) key as you click an outer path.

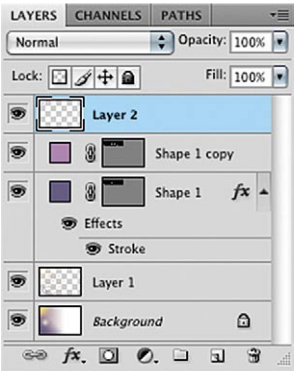


2 If you do not hold down the Alt (or Option) key when you click, the Direct Selection tool will select a single point or line segment. Pressing the Delete key will only delete that single point or line segment until you press it a second time. Alt-click (or Option-click) on the outer path inside the *a* and then delete it.



3 Repeat this process with each shape, with the exception of the accent over the *e*. For the accent over the *e*, Alt-click (or Option-click) on the inner path this time and then press the Delete key. The result of all this selecting and deleting will look like what is shown here.

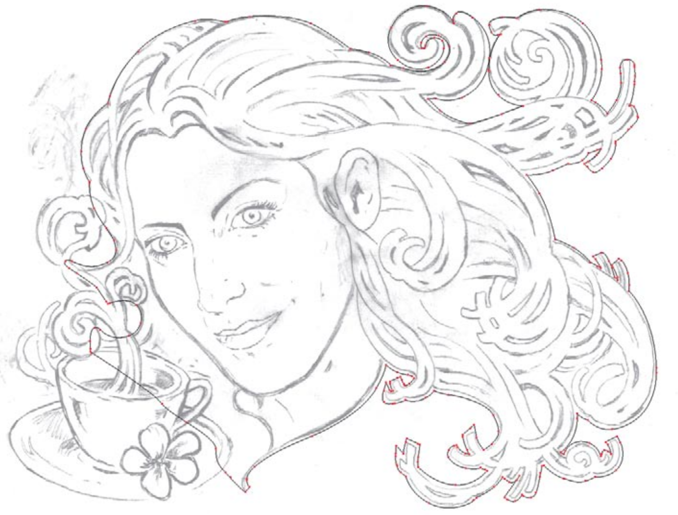


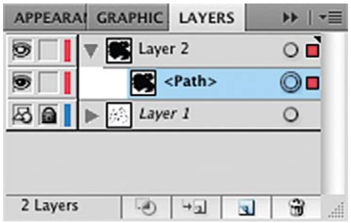


Normal
Opacity: 100%
Fill: 100%

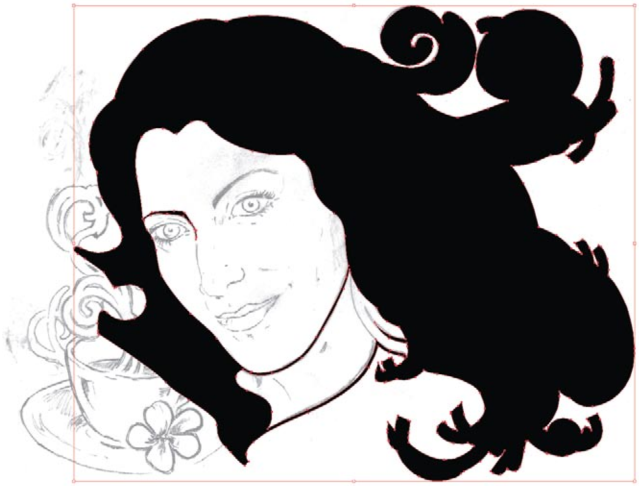
29 Control-click (or Command-click) on the duplicate shape layer's vector mask thumbnail in the Layers palette to load it as a selection. Create a new layer and ensure that it is targeted. Select the Gradient tool and set the preset to Foreground to Transparent if it isn't already. Also, ensure that the Radial method is specified in the Tool Options bar. Select a very light mauve foreground color from the picker. Click and drag from left to right within the selection on the new layer. This will create a gentle blend in this area. Deactivate the current selection.

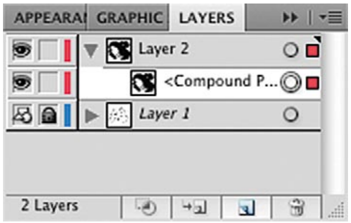
PART FOUR: The woman's face and hair





30 Return to Illustrator and create a new file. Once again, the artboard size doesn't matter. Simply hide the artboard from view. Set the Fill attribute to Black and the Stroke attribute to None. Choose File > Place from the menu and place the *face template.psd* file. As before, double-click the layer in the Layers palette and then enable the Template Layer option. Create a new layer and ensure that it remains targeted. Working in Outline mode, use the Pen tool to carefully create a large, closed shape that traces the outer contour of the woman's face and hair. Don't worry about the teacup or flowers at this point. You can simply create a simple line segment in the region that overlaps the teacup. Feel free to deviate from the sketch slightly as you see fit.

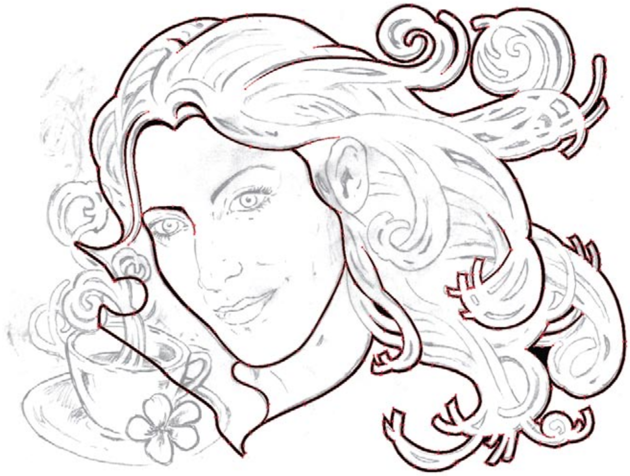


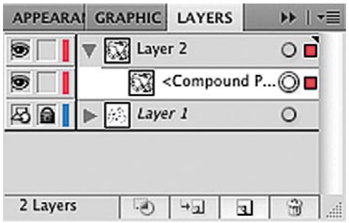


Illustrator workaround 3

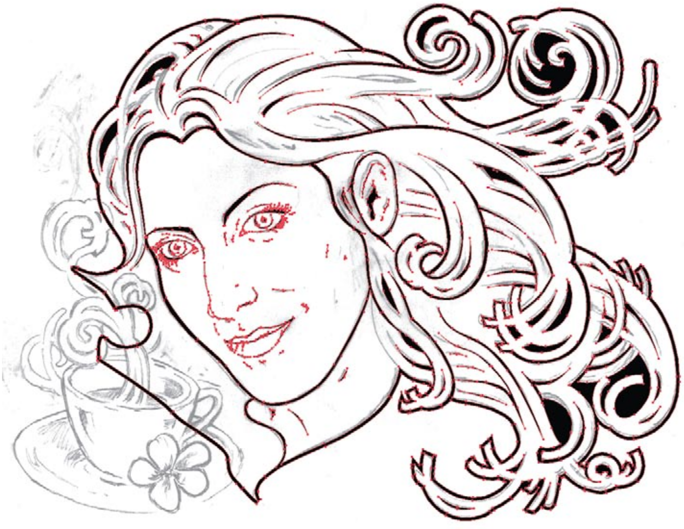
Due to the intricacy of drawing required for this illustrated component, it is likely that most of you will want to at least peruse the actual file used here. If you want to use that file instead of creating your own, that is fine, too. This file is called *main.ai* and is included within the downloadable project files for this chapter. The woman's face is on its own layer in the Illustrator file. Also included in this file, on separate layers, is the finished artwork for the teacup and flower that you'll create later in the chapter. Feel free to inspect these as well, or simply use them in place of creating your own components later on.

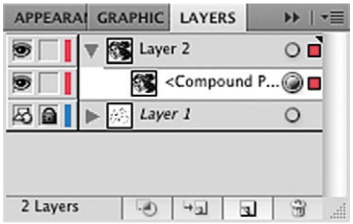
31 Now proceed to draw another shape that traces the interior of her face. This will entail tracing around the eyebrow at the left as well. Press Control-A (or Command-A) to select all and then click the Minus Front button in the Pathfinder palette to subtract the face shape from the outer shape you created previously. While the resulting group is selected, choose Object > Compound Path > Make from the menu. Next, repeat the process by tracing her neck area; take some liberty while tracing the right side of this shape. When the shape is closed, select all, perform the Minus Front operation, and then convert the resulting group to a compound path. Switch to Preview mode to view the results thus far.



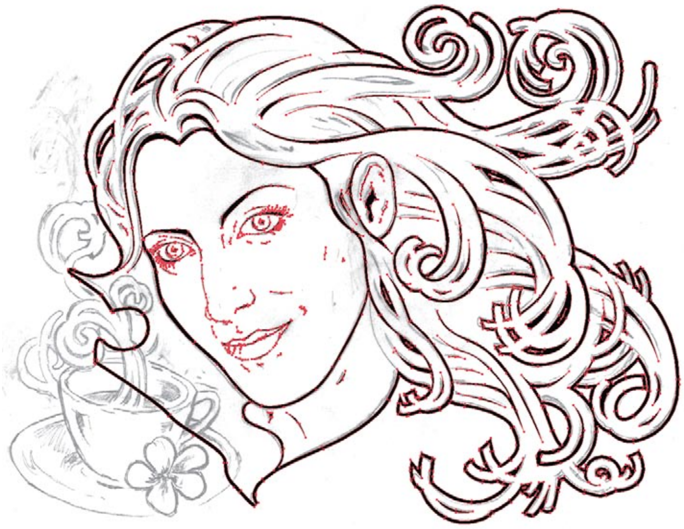


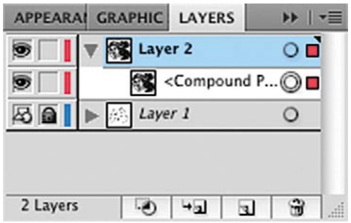
32 Now begin the task of tracing the interior of her hair area to create a single, very complicated, closed shape. Just follow the contour all the way around. In some instances you'll be moving inward to trace a detail from the sketch, then you'll double-back along the other side of the detail to get back to the interior edge and then continue on from there. This process will take a while, so allocate a fair amount of time for it. When you're finished, select all, perform the Minus Front operation, and then convert the resulting group to a compound path.





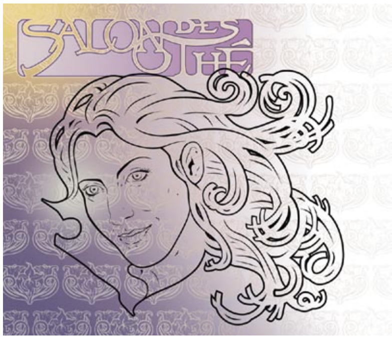
33 The next step is to trace all the solid black details. Using the template as your guide, create closed shapes to represent all the details in the woman's face and hair. When you get to areas where there are holes or spaces between strands of her hair, simply trace the outer perimeter for the time being. We'll punch holes in these regions in the next step. For now, take your time and create all the black regions. When you're happy with the result, select all and click the Unite button in the Pathfinder palette. After uniting, convert the group into a compound path.

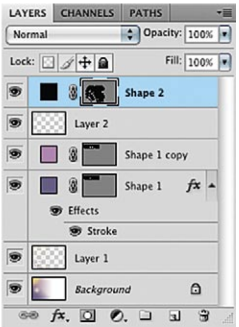




34 Now you'll need to switch back to Outline mode, because we're going to create the holes or negative spaces in the large black regions of her hair. If you work in Preview mode, you won't be able to use the underlying template as your guide. Begin by creating a single, white inner shape that traces the inner line of one of these negative spaces. Ensure that the shape is closed and then select all. After selecting all, click the Minus Front button in the Pathfinder. After doing that, convert the resulting group to a compound path. Then repeat this entire process for each hole or negative space. First create the closed shape, select all, perform the Minus Front operation, and then convert the resulting group to a compound path. Do not deviate from this workflow or things could go horribly wrong. You must work with one piece at a time. This process can be time consuming, but it is essential in ensuring that the resulting compound shape looks like the one shown here and will work properly when you bring it into Photoshop.

PART FIVE: Color, shading, and detail


SALON DES THÉ


LAYERS
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Opacity: 100%
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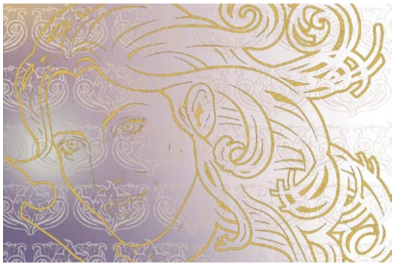
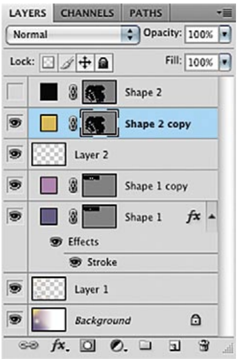
Fill: 100%
Shape 2
Layer 2
Shape 1 copy
Shape 1
Effects
Stroke
Layer 1
Background

35 Select your compound shape and copy it. Save this Illustrator file and keep it open, since we will be returning to it. Return to your working file in Photoshop. Set the foreground color to black by pressing the D key on your keyboard, and then paste. When the Paste options appear, choose the Shape Layer option to paste the copied art in as a shape layer. Leave the fill color of the shape layer set to Black and use the Move tool to drag it to the left, positioning it beneath the text.

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Opacity: 100%
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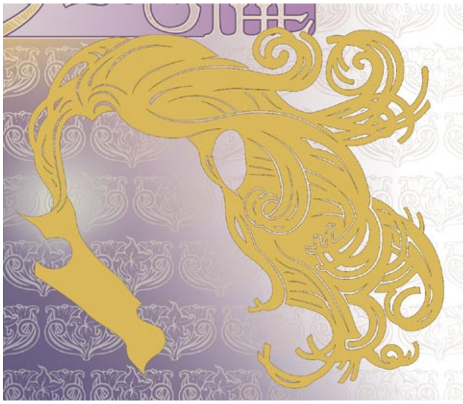
Fill: 100%
Shape 2
Shape 2 copy
Layer 2
Shape 1 copy
Shape 1
Effects
Stroke
Layer 1
Background

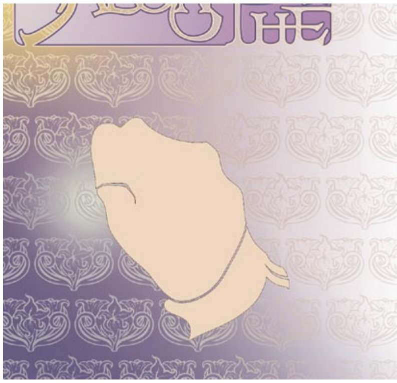
36 In the Layers palette, target your new shape layer. Hold down the Alt (or Option) key, and then drag downward in the Layers palette until you see a horizontal, thick, black line appear directly beneath the shape layer. Release the mouse button and you'll see that this is an excellent way to not only duplicate a layer but to also place your duplicate where you want it within the Layers palette. Disable the visibility of your original layer and then double-click your duplicate layer thumbnail in the Layers palette, to open the picker. Choose yellow to change the duplicate layer's fill color to yellow.

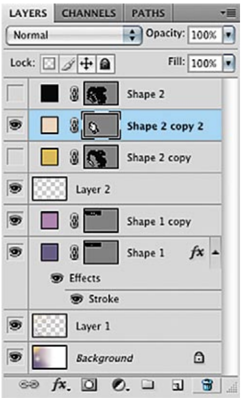
Exporting paths

At this point, you can clearly see that there are a number of ways to incorporate Illustrator art into your Photoshop files. However, this relationship is a two-way street, and paths can also be exported from Photoshop to use within Illustrator. To export a path, choose File > Export > Paths to Illustrator. This choice allows you to create a new Illustrator file containing one of your Photoshop paths. In the Export Paths box, you can name your file and choose which path to export from the Write menu. The new file containing your path can then be opened and edited within Illustrator.



37 Choose the Direct Selection tool from the Toolbar and use it to click the outside path component of your shape layer while holding down the Alt (or Option) key. This will select the entire outer path component without selecting any of the other path components. Press the Delete key and the selected path component will disappear. This alters the behavior of other path components, inverting the effect on the shape layer. The result is a filled hair shape, but it is not perfect. Some components will invert that you don't want to invert. Alt-click (or Option-click) on any unwanted inverted components, such as her face, neck, ear, and the areas between strands of her hair. Press the Delete key to remove them. Remove any remaining details that should appear on the black layer, especially facial details.

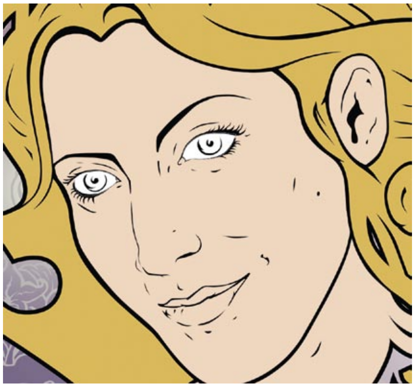


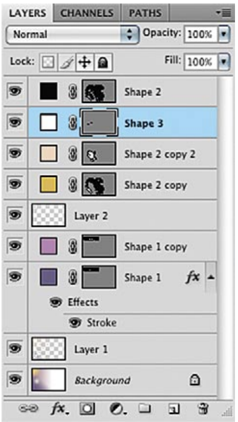


38 Disable the visibility of your new yellow hair shape layer. Alt-drag (or Option-drag) your hidden black outline shape layer again to create another duplicate shape layer that resides between the original black outline layer and the yellow hair layer in the Layers palette. Enable the visibility of your newly duplicated layer. Again, use the Direct Selection tool to Alt-click (or Option-click) the outer path. Delete the selected outer path to invert the shape layer. Then systematically delete all shape layer components that are not areas of her skin. Again, use the method of Alt-clicking (or Option-clicking) and deleting. Take care when you get to the ear. Ensure that you delete the outer path and the details but not the inner path. Double-click the Shape Layer thumbnail in the Layers palette and change the color of the shape layer to a flesh tone.

Saving paths as shapes

You can store any path or shape layer's vector mask as a custom shape, to be used again at any point later on. To save a path as a custom shape, first target the path in the Paths palette. Then choose Edit > Define Custom Shape from the menu. Name your shape and click OK. This will add your shape to the custom shape pop-up palette in the Tool Options bar, which is available only when you're using the Custom Shape tool. Simply choose your new custom shape from the available options in the pop-up menu. Then click and drag to create a new instance of your shape. Holding down the Shift key as you drag will ensure that your shape is proportionately accurate.

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Shape 3
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Shape 1 copy
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Layer 1
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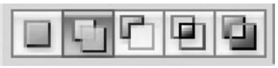
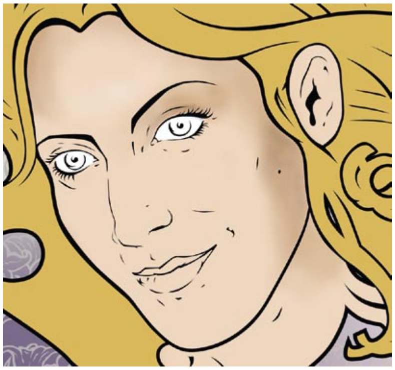
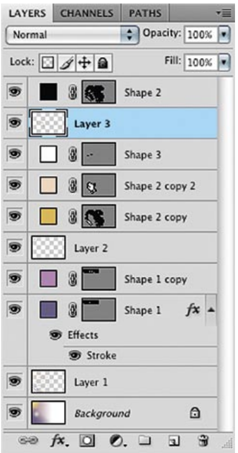


39 Enable the visibility of your black outline and yellow hair shape layers in the Layers palette. Select the Pen tool. Ensure that it is set to create a new shape layer in the Tool Options bar, and set your foreground color to White. Use the Pen tool to carefully draw a closed path that outlines her eye, creating a new shape layer. Then choose the Add to Shape Area option in the Tool Options bar and create a closed path component around her other eye, adding it to the existing shape layer.

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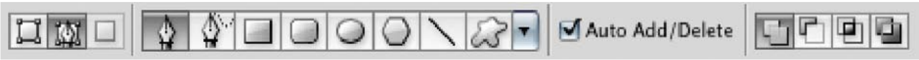
Shape 2
Layer 3
Shape 3
Shape 2 copy 2
Shape 2 copy
Layer 2
Shape 1 copy
Shape 1
fx
Effects
Stroke
Layer 1
Background

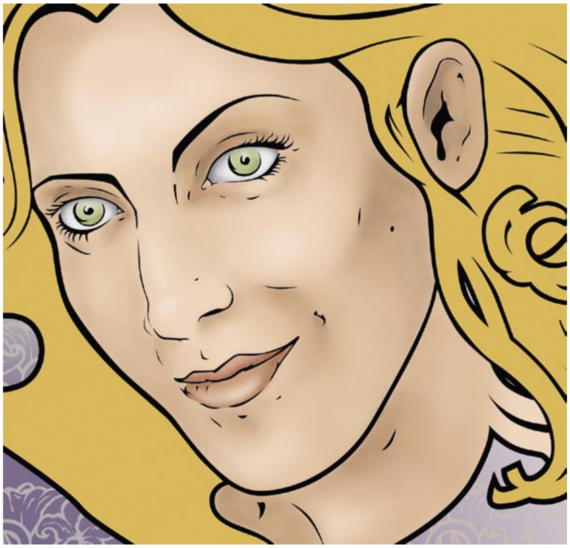
40 Now add a bit of soft, painterly shading to your artwork, in keeping with the signature appearance of authentic Art Noveau. First, Control-click (or Command-click) on your flesh-colored shape layer to load a selection based on the contents of that particular layer. Create a new layer that resides directly above your white eyes shape layer in the Layers palette. Select the Brush tool and choose a large, soft, round brush tip preset. Set the opacity of your brush around 20% in the Tool Options bar. Select a darker flesh color from the picker and begin to paint some shaded areas in the selection on the new layer.

Moving layer effects

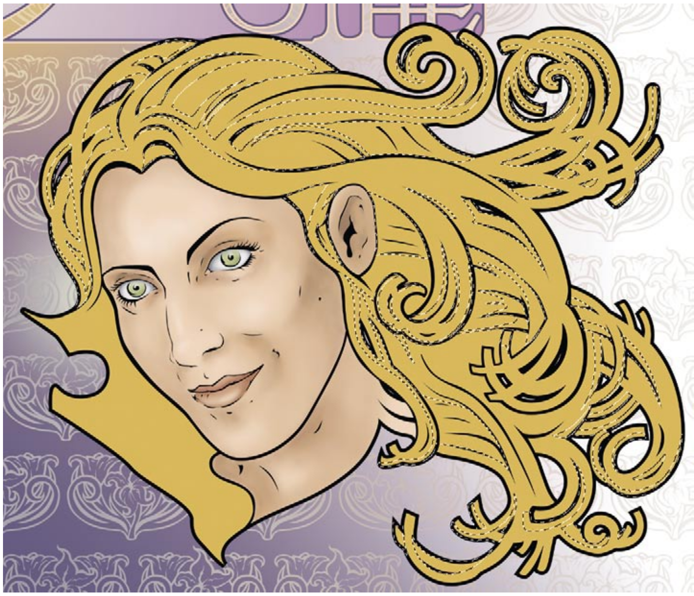
When you apply a layer effect to a layer, it is not permanently attached to that layer. You can move it to another layer by simply clicking the layer style and dragging it onto another layer in the Layers palette. Or you can copy your layer style to another layer by clicking it and then Alt-dragging (or Option-dragging) it onto another layer.

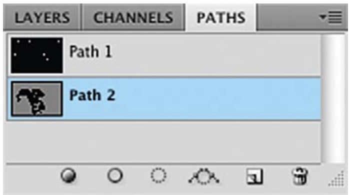


☑ Auto Add/Delete

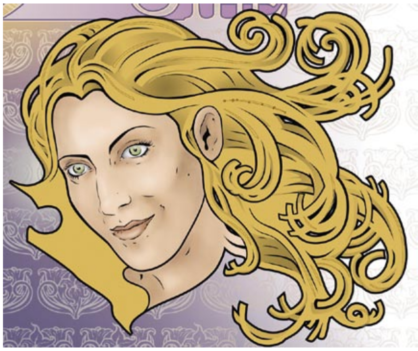


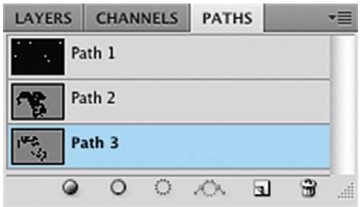
41 Continue to paint shaded areas on the woman's face. Choose lighter or darker flesh colors from the picker and increase or decrease brush opacity as required until you've painted a sufficient amount of soft shading onto her skin. Next, use the same techniques, with much smaller brush tips and different colors, to paint shading into the whites her eyes, her iris areas, and her lips. When you're finished, deactivate the selection and select the Pen tool. Ensure that the Pen tool is set to create paths, not shape layers, and that the Add To Path Area option is selected in the Tool Options bar.





42 Now take a good look at the woman's hair and try to visualize where darker areas would naturally occur within the yellow areas. Carefully draw numerous closed path components wherever you think her hair should have some darker shading. Keep your shapes simple and use the contours indicated by the black outline layer as your guide. When you've finished creating the path components, generate a selection from the entire path by Control-clicking (or Command-clicking) it in the Paths palette.

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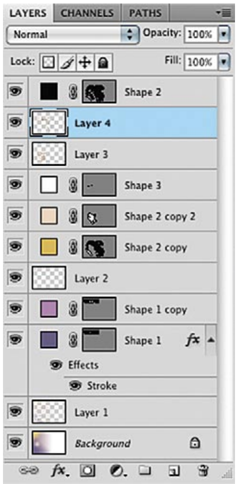
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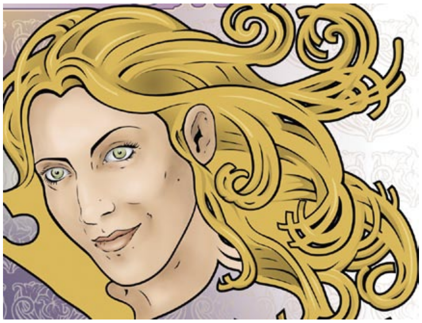
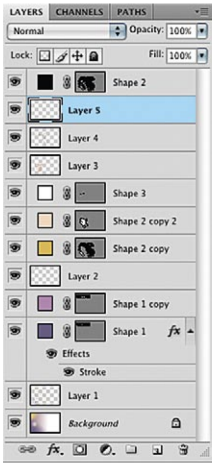
Shape 2
Layer 4
Layer 3
Shape 3
Shape 2 copy 2
Shape 2 copy
Layer 2
Shape 1 copy
Shape 1
Effects
Stroke
Layer 1
Background

43 Return to the Layers palette. While the current selection is active, create a new layer and ensure that it is targeted. Select the Gradient tool from the Toolbar. Choose a brown foreground color from the picker and then click and drag within the active selection to add numerous gradients. Create a variety of radial, foreground-to-transparent gradients within the selection. Deactivate the selection and then select the Pen tool. Now use the Pen tool to create a series of path components to represent small highlight areas within her hair. Again, use the black outline art as your visual guide.




LAYERS
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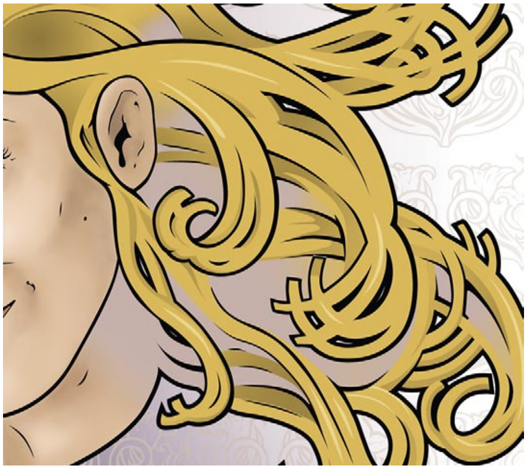
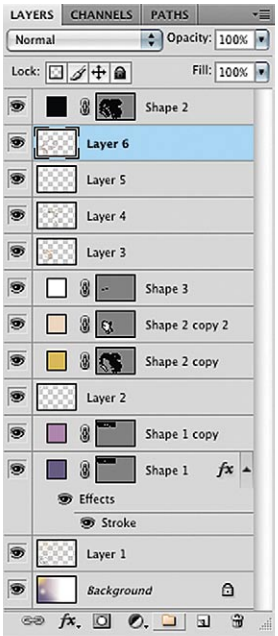
Shape 2
Layer 5
Layer 4
Layer 3
Shape 3
Shape 2 copy 2
Shape 2 copy
Layer 2
Shape 1 copy
Shape 1
Effects
Stroke
Layer 1
Background

44 Load the new path as a selection and create a new layer. Choose a very light yellow foreground color from the picker. Be certain to select a yellow that is much lighter than the color of her hair. Fill the active selection with the new light yellow foreground color on the new layer by typing Alt-Delete (or Option-Delete) on the keyboard. Deactivate the selection.

Other paste options

In addition to pasting your Illustrator art into Photoshop as paths and shape layers, there are a couple of other options. You can paste copied artwork from Illustrator into Photoshop as pixels or Smart Objects. Pasting as pixels will add your artwork to the canvas with a bounding box surrounding it. Similar to Free Transform, you can adjust size, angle, or position and then press the Enter key to apply the transformation. Once the transformation is applied, the artwork is rasterized. Smart objects are pasted in with the same bounding box surrounding them, yet they are not rasterized and remain editable. You can edit the source content of your smart object by double-clicking it in the Layers palette.




LAYERS
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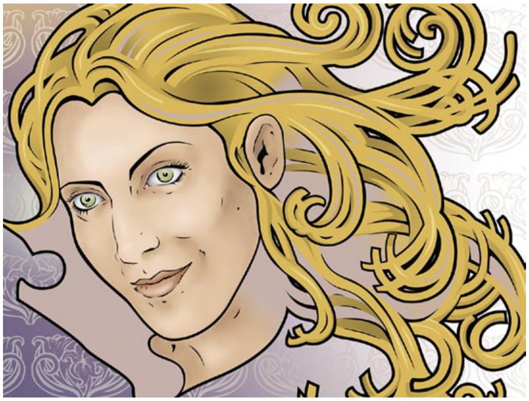
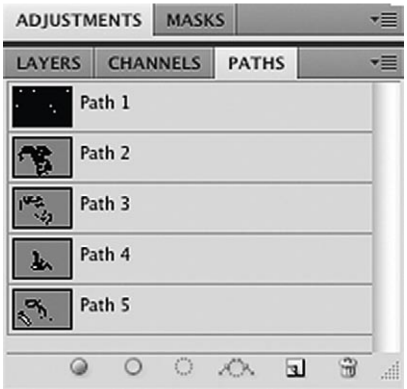
Shape 2
Layer 6
Layer 5
Layer 4
Layer 3
Shape 3
Shape 2 copy 2
Shape 2 copy
Layer 2
Shape 1 copy
Shape 1
fx
Effects
Stroke
Layer 1
Background

45 Using the methods we used on the previous page, let's add some unnatural mauve details into our subject's hair. First, use the Pen tool to draw closed path components within her hair that will accommodate gradients of a different color. Load the entire finished path as a selection, create a new layer, and select the Gradient tool. Choose a mauve foreground color from the picker and create a series of radial, foreground-to-transparent gradients within the selection until it resembles what is shown here. Deactivate the selection when complete.




ADJUSTMENTS
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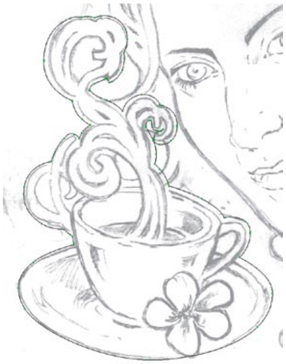
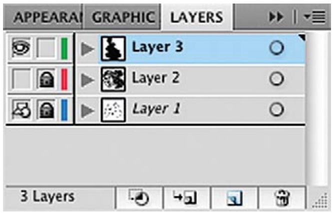
46 Now use the Pen tool to draw a number of closed path components in areas where you want to create some mauve highlights in her hair. Use the same logic and techniques that you used to create the yellow highlight path components. Also, create a closed path component that surrounds the area in her hair to the left of her cheek and neck. Generate a selection from the entire path and fill the contents of the selection with the current mauve foreground color on the same layer as your mauve gradients. Deactivate the selection.

PART SIX: Creating the teacup

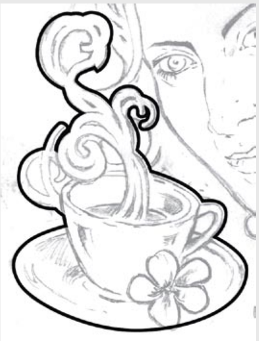




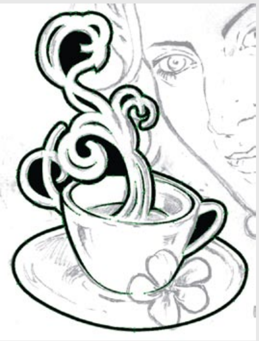
47 Return to your open Illustrator file and disable the visibility of the compound path layer by clicking the Visibility icon in the column to the left of it in the Layers palette. Then lock the layer by clicking in the column to the right of that. Create a new layer, ensure that it is targeted, and select the Pen tool. Use the Pen tool to carefully create a closed shape around the outer perimeter of the teacup and rising smoke. Just focus on tracing the exterior at this point, and feel free to improve on what is indicated by the sketch. Close the shape when you're finished.

Repeating the process

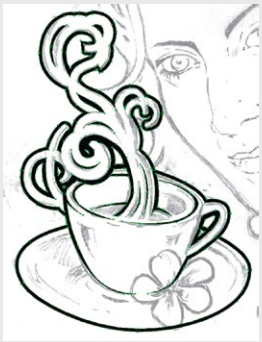
Use what is now becoming a familiar procedure to finish creating the teacup.



1 Now use the Pen tool to trace the inner region of the teacup and the smoke. Create a closed shape and then select all. When everything is selected, click the Minus Front button in the Pathfinder palette. After that, choose Object > Compound Path > Make from the menu.

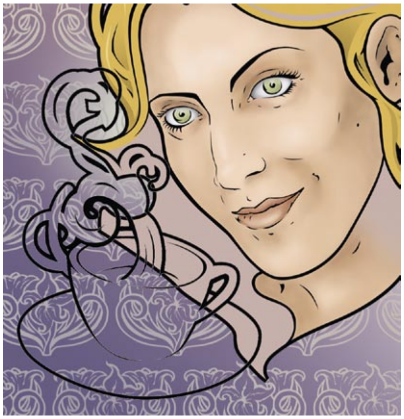


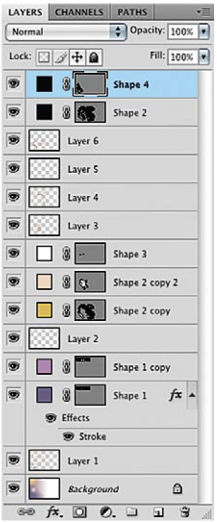
2 Next, use the Pen tool to create a series of closed shapes that trace over all the solid black details in the underlying sketch. Overlap the existing shape in regions where the details should connect with it. Select all and then click the Unite button in the Pathfinder. Convert the resulting group into a compound path.



3 Switch to Outline mode if you're currently working in Preview mode, so that you can see the underlying sketch. Draw a shape that traces an inner hole or negative space within a solid black shape. Select all, perform the Minus Front operation, and then convert the resulting group to a compound path. Repeat this process as many times as necessary to punch the required holes into the solid black shapes. Switch to Preview mode to view the result.

48 Copy the compound path and save the Illustrator file. Leave it open because we'll be returning to it shortly. Return to your working file in Photoshop and press the D key to set the foreground color to black. When the Paste options appear, choose Shape Layer to paste the copied art into your file as a new shape layer. Use the Move tool to move the teacup outline to the lower left of the canvas.

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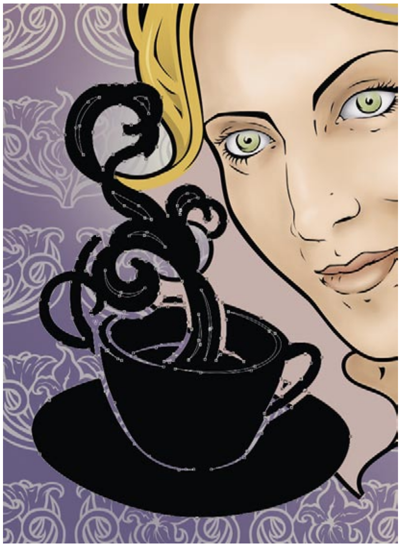
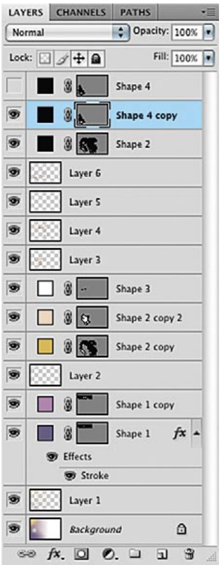
Effects
Stroke
Layer 1
Background

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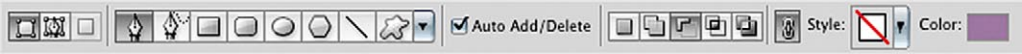
Shape 3
Shape 2 copy 2
Shape 2 copy
Layer 2
Shape 1 copy
Shape 1
Effects
Stroke
Layer 1
Background

49 Create a duplicate of the shape layer underneath the original. Disable the visibility of your original layer and target the duplicate in the Layers palette. As you did with her hair and face previously, use the Direct Selection tool to Alt-click (or Option-click) a point or line segment of the outer path component in this shape layer. Press the Delete key to remove the outer path component and invert the shape layer areas. Use this same method to remove unwanted, inverted path components from the layer—places such as the inner paths that are used to define holes or negative spaces.

Dragging from Illustrator

If you want to add Illustrator art to your Photoshop file as a smart object, there is a quicker method than copying and pasting. Use the Standard Screen Mode option in Illustrator and position your window so that you can see your open Photoshop destination file in the background. Then simply drag your Illustrator art with the Selection tool into your Photoshop file in the background. The dragged artwork will be added to your Photoshop file as a smart object.


☑ Auto Add/Delete

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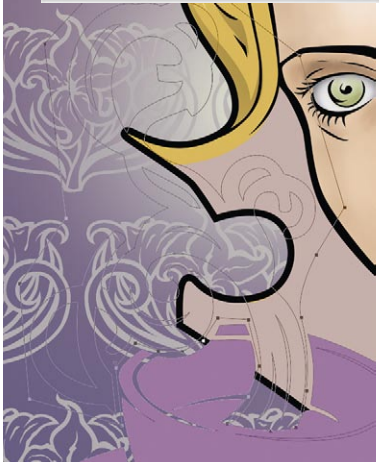
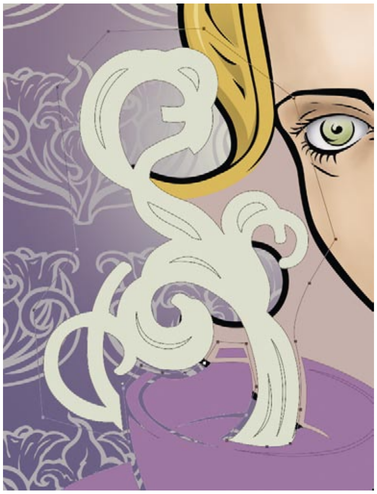
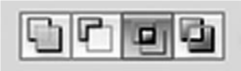
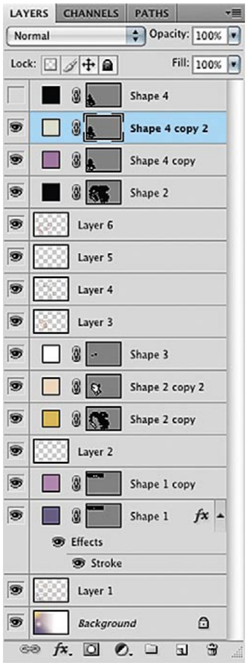
Color:



50 Ensure that no path component is selected. If you want to ensure that nothing is selected, simply use the Path Selection tool to click an area of the canvas that contains no path. Change the fill color of your duplicated shape layer to a light purple and select the Pen tool. In the Tool Options bar, ensure that the Pen tool is set to create shape layers and that the Subtract From Shape Area option is enabled. Use the Pen tool to carefully draw a path component that covers only the steam that is rising from the teacup. Adding this path component to your shape layer hides but does not permanently remove the steam area of your shape layer.



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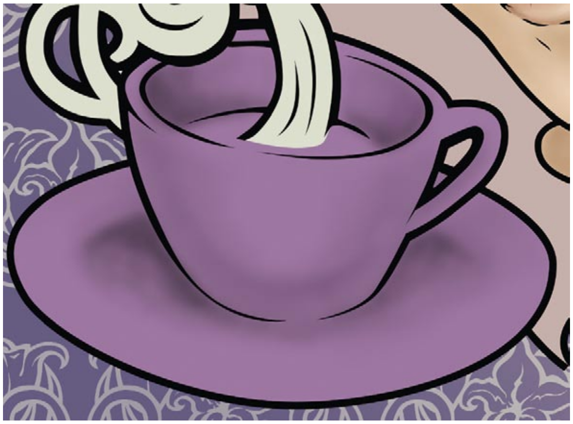
Fill: 100%

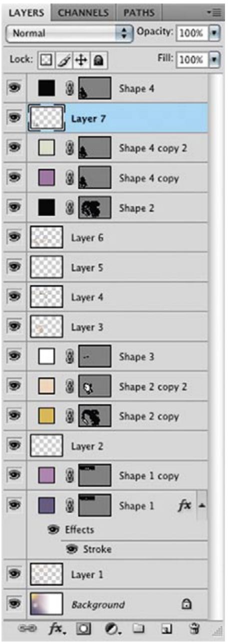
LAYERS
CHANNELS
PATHS
Lock:
Shape 4
Shape 4 copy 2
Shape 4 copy
Shape 2
Layer 6
Layer 5
Layer 4
Layer 3
Shape 3
Shape 2 copy 2
Shape 2 copy
Layer 2
Shape 1 copy
Shape 1
Effects
Stroke
Layer 1
Background

51 Duplicate the purple teacup shape layer. Target your new duplicate layer and change the fill color to a light green. Choose the Path Selection tool and use it to select the path component on your duplicate shape layer that hides the steam shape. With the path component selected, click the Intersect Shape Areas button in the Tool Options bar. Doing this will only reveal areas on the shape layer where shape components overlap.

Combining

You can use components together to produce a variety of shape area effects in a single shape layer. However, you can create a final, single shape from your shape layer components by selecting them with the Path Selection tool and then clicking the Combine button in the Tool Options bar. Once you combine the different components, you will lose the ability to move or edit the components individually, because the result of combining is one single shape.



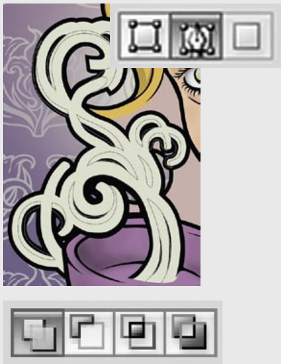

LAYERS
CHANNELS
PATHS
Lock:
Shape 4
Layer 7
Shape 4 copy 2
Shape 4 copy
Shape 2
Layer 6
Layer 5
Layer 4
Layer 3
Shape 3
Shape 2 copy 2
Shape 2 copy
Layer 2
Shape 1 copy
Shape 1
Effects
Stroke
Layer 1
Background

Normal
Opacity: 100%
Fill: 100%

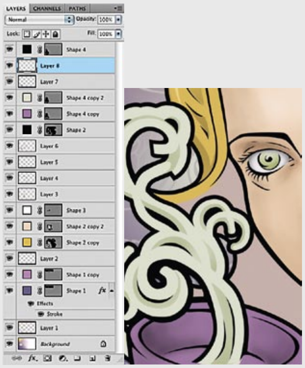
52 Create a new layer in the Layers palette and then Control-click (or Command-click) the purple teacup shape layer to generate a selection from the visible contents of the layer. Target your new layer and enable the visibility of the black outline shape layer directly above it in the Layers palette. Now select the Brush tool. Use a similar large, soft, round, brush preset and opacity setting to those used previously to paint the shading on the woman's skin. Use darker purple foreground colors to paint shading onto the teacup within the selection border. Adjust opacity and brush size as necessary. Deselect when finished.

Add shadows and highlights

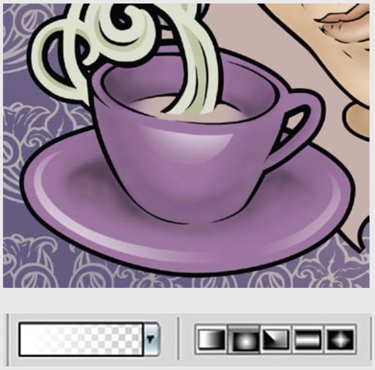
Introduce a series of gradients into path-based selections to add shadows within the steam and highlights onto the cup and saucer.



1 Select the Pen tool. Ensure that it is set to create paths and that the Add To Path Area function is enabled in the Tool Options bar. Draw a series of path components to define areas within the steam where shading should occur.

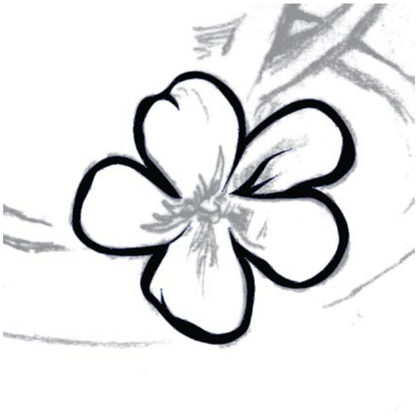


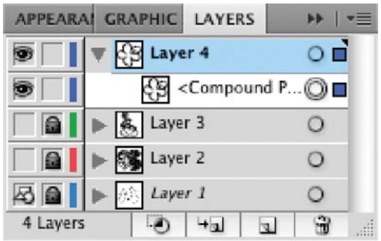
2 Load the entire path as a selection and create a new layer. Use the Gradient tool to create a series of darker green, radial, foreground-to-transparent gradients within the active selection on the new layer, to indicate shaded areas.



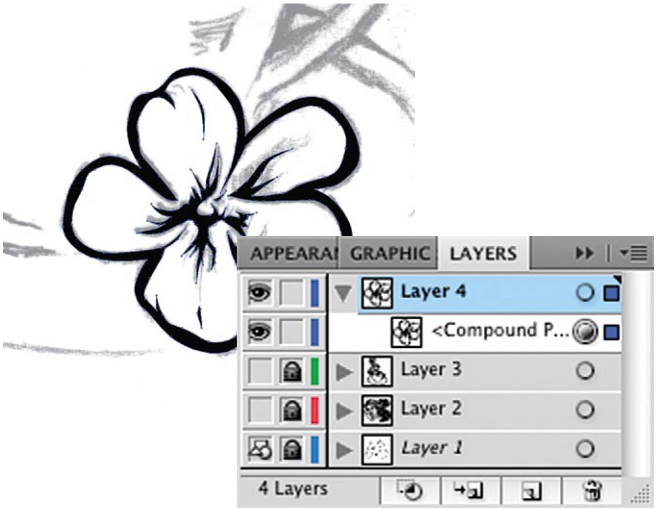
3 Now use the Pen tool to create closed path components on the cup and saucer and the coffee's surface. Generate a selection from the entire path and fill the selections with white or mauve, radial, foreground-to-transparent gradients on the same layer. Deselect.

PART SEVEN: Adding the flowers





53 Return to your open file in Illustrator. Disable the visibility of the teacup layer and lock it. Use the Pen tool to draw a closed shape that traces the outer edge of the flower on the teacup. After that, switch to Outline mode if necessary to view the underlying sketch. Then draw another closed shape that traces the interior of the flower. Feel free to trace the contour of some of the petal details that connect with the outline, as indicated by the sketch while you create this shape. After closing the shape, select all and perform a Minus Front operation to subtract the inner path from the outer path. Convert the resulting group to a compound path.

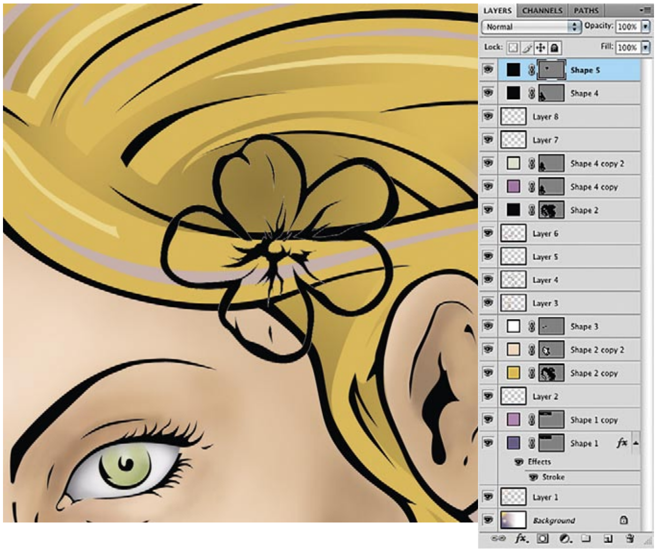


54 Use the Pen tool to create a series of closed paths that trace the details in the center of the flower as well as the details on the petals. When you are finished, select all and perform a Unite operation via the Pathfinder palette. Convert the resulting group to a compound path and copy it.

Visibility and locks

After locking a layer or disabling the visibility, you can unlock or enable the visibility again by clicking in the same column in the Layers palette. For obvious reasons, it is good practice to keep things separate as you work. However, by keeping everything in one file, there is also the bonus of being able to reuse the same placed sketch rather than creating a new file for each component, placing the sketch each time, creating a template layer each time, and so on.

55 Return to your working file in Photoshop. Press the D key on the keyboard to set the foreground color to black. Paste the copied flower art into Photoshop as a new shape layer. Drag the layer to the top of the stack in the Layers palette. Use the Move tool to position the flower so that it overlaps the woman's hair near her temple on the canvas.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PATHS
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Lock:
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Shape 5
Shape 4
Layer 8
Layer 7
Shape 4 copy 2
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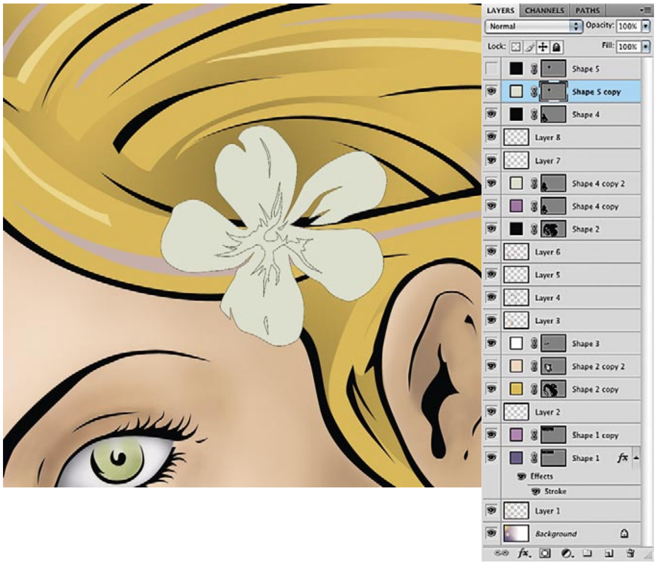
Effects
Stroke
Layer 1
Background


LAYERS
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Lock:
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Shape 5
Shape 5 copy
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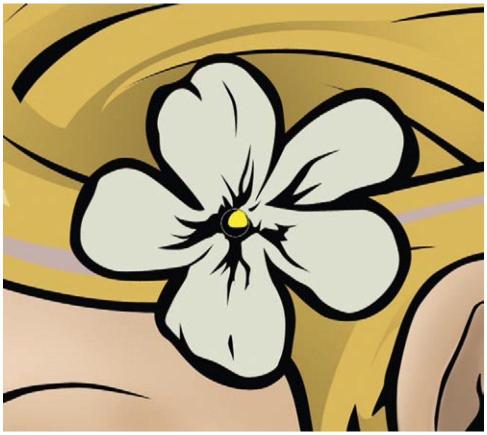
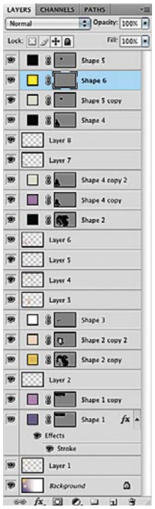
Layer 8
Layer 7
Shape 4 copy 2
Shape 4 copy
Shape 2
Layer 6
Layer 5
Layer 4
Layer 3
Shape 3
Shape 2 copy 2
Shape 2 copy
Layer 2
Shape 1 copy
Shape 1
Effects
Stroke
Layer 1
Background

Viewing effects

When you add an effect to your layer, it is shown beneath the layer. To hide the effect in the Layers palette, simply click the Expand/Collapse button to the right of the layer thumbnail. To view a hidden effect, click the same button to expand the layer, revealing the effects. To hide an effect on the actual canvas, click the Visibility icon (the eye) to the left of the effect. Repeat the same method to make the effect visible again.

56 Create a duplicate of this shape layer beneath the original in the Layers palette. Disable the visibility of your original flower shape layer and ensure that your duplicate is targeted. As you've done previously with the woman and the teacup, use the Direct Selection tool to click a point or line segment of the outer path while holding down the Alt (or Option) key. Press the Delete key to invert the area of your shape. Double-click the layer in the Layers palette and change the color of the shape layer to a light green, like the green steam rising from the teacup.

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PATHS
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Lock:
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Shape 5
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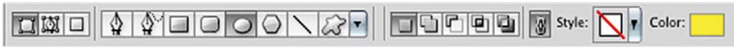
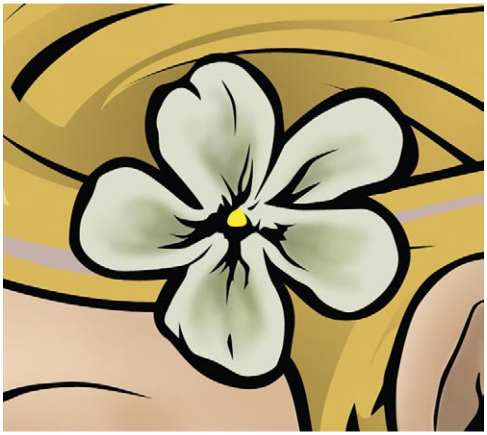
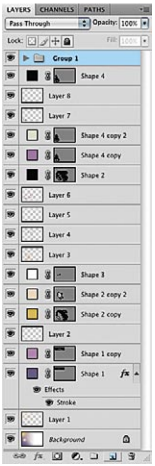
Effects
Stroke
Layer 1
Background


Style:
Color:

57 Enable the visibility of the flower black outline layer. Select the Ellipse shape tool. Ensure that it is set to create shape layers rather than paths and that the Create New Shape Layer option is enabled in the Tool Options bar. Draw an ellipse in the center of the flower to create a new shape layer just below the black outline layer. While your new shape layer is targeted, click the color swatch in the Tool Options bar and select a yellow color from the picker.

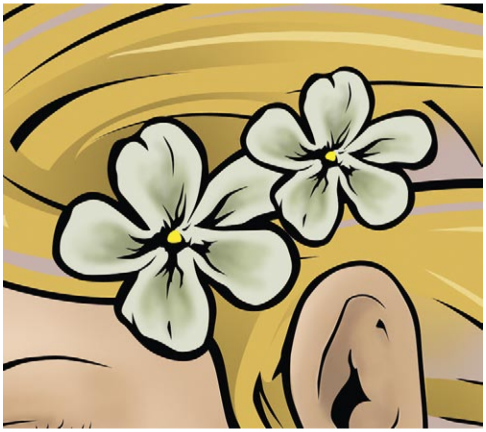


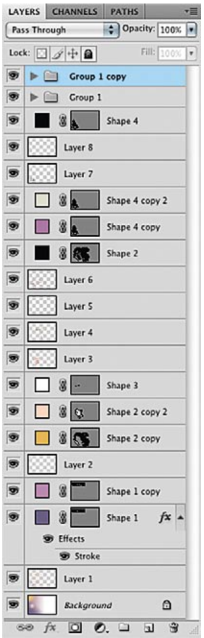

LAYERS
CHANNELS
PATHS
Pass Through
Opacity: 100%
Lock:
Fill: 100%
Group 1
Shape 4
Layer 8
Layer 7
Shape 4 copy 2
Shape 4 copy
Shape 2
Layer 6
Layer 5
Layer 4
Layer 3
Shape 3
Shape 2 copy 2
Shape 2 copy
Layer 2
Shape 1 copy
Shape 1
Effects
Stroke
Layer 1
Background

58 Load a selection from the green flower shape layer by Control-clicking (or Command-clicking) it in the Layers palette. Create a new layer and select the Brush tool. As you've done previously with the other image elements, choose a soft, round brush preset and a low opacity setting. Paint inside the selection on the new layer, using a darker green color than the flower petals to add shading. Vary brush size, color, and opacity as necessary to achieve a pleasing result. Deactivate the selection when you're finished. Click the top shape layer, the black outline layer. Then Shift-click the bottom flower layer. Press Control-G (or Command-G) to group the layers.

Pasting paths

When pasting paths into Photoshop from Illustrator, it is very important to keep an eye on what is currently targeted in the Photoshop Paths palette. To paste illustrator art into Photoshop as a new path, there must be no path targeted in the Paths palette at the time of pasting. If you have a path targeted when you paste, the newly pasted vectors will be added to the currently targeted path as additional path components.




LAYERS
CHANNELS
PATHS
Pass Through
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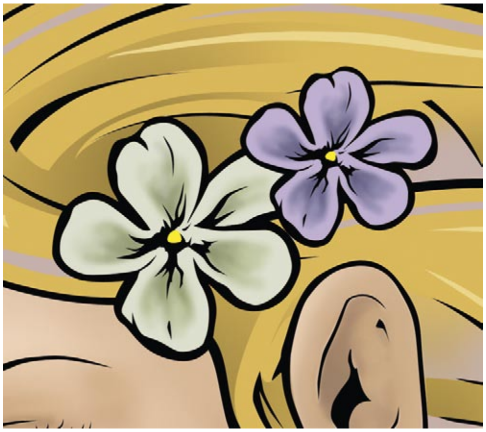
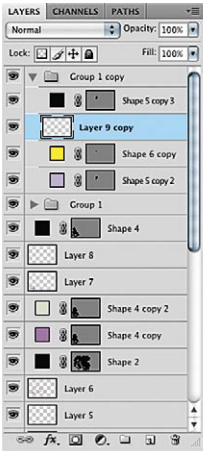
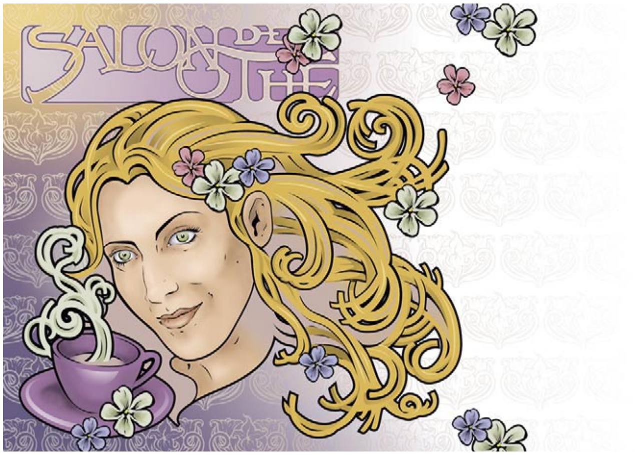
Lock:
Fill: 100%
Group 1 copy
Group 1
Shape 4
Layer 8
Layer 7
Shape 4 copy 2
Shape 4 copy
Shape 2
Layer 6
Layer 5
Layer 4
Layer 3
Shape 3
Shape 2 copy 2
Shape 2 copy
Layer 2
Shape 1 copy
Shape 1
fx
Effects
Stroke
Layer 1
Background

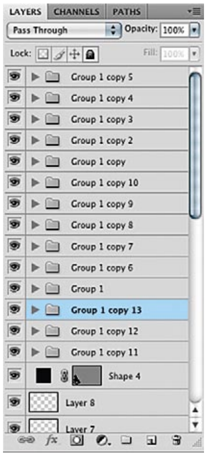
59 Duplicate your group by dragging it onto the Create A New Layer button at the bottom of the Layers palette. Choose Edit-Free Transform from the menu, and Shift-drag a bounding box corner point inward slightly to reduce the size of the flower. Click and drag within the center of the bounding box to reposition the duplicated group on the canvas. If you want to rotate your group, simply move the mouse outside the bounding box and then click and drag. When you're finished, press the Enter key to apply the transformation.




LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Group 1 copy
Shape 5 copy 3
Layer 9 copy
Shape 6 copy
Shape 5 copy 2
Group 1
Shape 4
Layer 8
Layer 7
Shape 4 copy 2
Shape 4 copy
Shape 2
Layer 6
Layer 5

60 Once you've duplicated the flower and changed the size and position, the next step is to change the color. Inside the duplicate group, double-click the light green shape layer to open the picker. Choose a purple/blue color and click OK to change the color of the shape layer. Next, target the layer within the duplicate group that contains the painted shading. Choose Image > Adjustments > Hue/Saturation from the menu. Adjust the sliders until the shading is a darker purple/blue color.



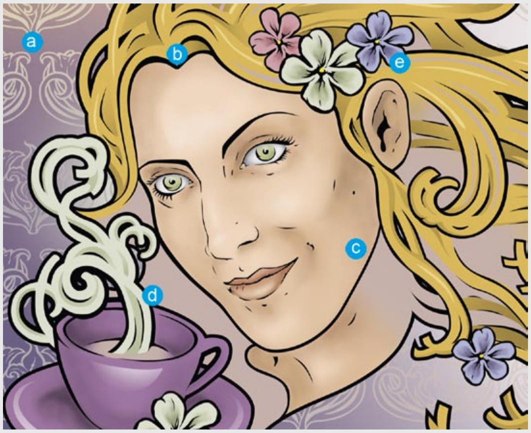


Pass Through
Opacity: 100%
Fill: 100%
Group 1 copy 5
Group 1 copy 4
Group 1 copy 3
Group 1 copy 2
Group 1 copy
Group 1 copy 10
Group 1 copy 9
Group 1 copy 8
Group 1 copy 7
Group 1 copy 6
Group 1
Group 1 copy 13
Group 1 copy 12
Group 1 copy 11
Shape 4
Layer 8
Layer 7

61 Create numerous duplicates of the flower groups. Alter the color of the petals shape layer and the hue/saturation of the paint layer within various duplicate groups to add some variety in terms of flower color. Use Free Transform to resize and rotate them as necessary. Scatter the flowers around the canvas area. Move the groups up and down within the Layers palette as necessary so that some flowers overlap others on the canvas area. At this point, feel free to edit existing layers and embellish the image further using the plethora of techniques we've employed in this chapter.

Final analysis

Let's take a moment to reflect on the Illustrator and Photoshop methods that were essential to the success of creating this Art Nouveau masterpiece.



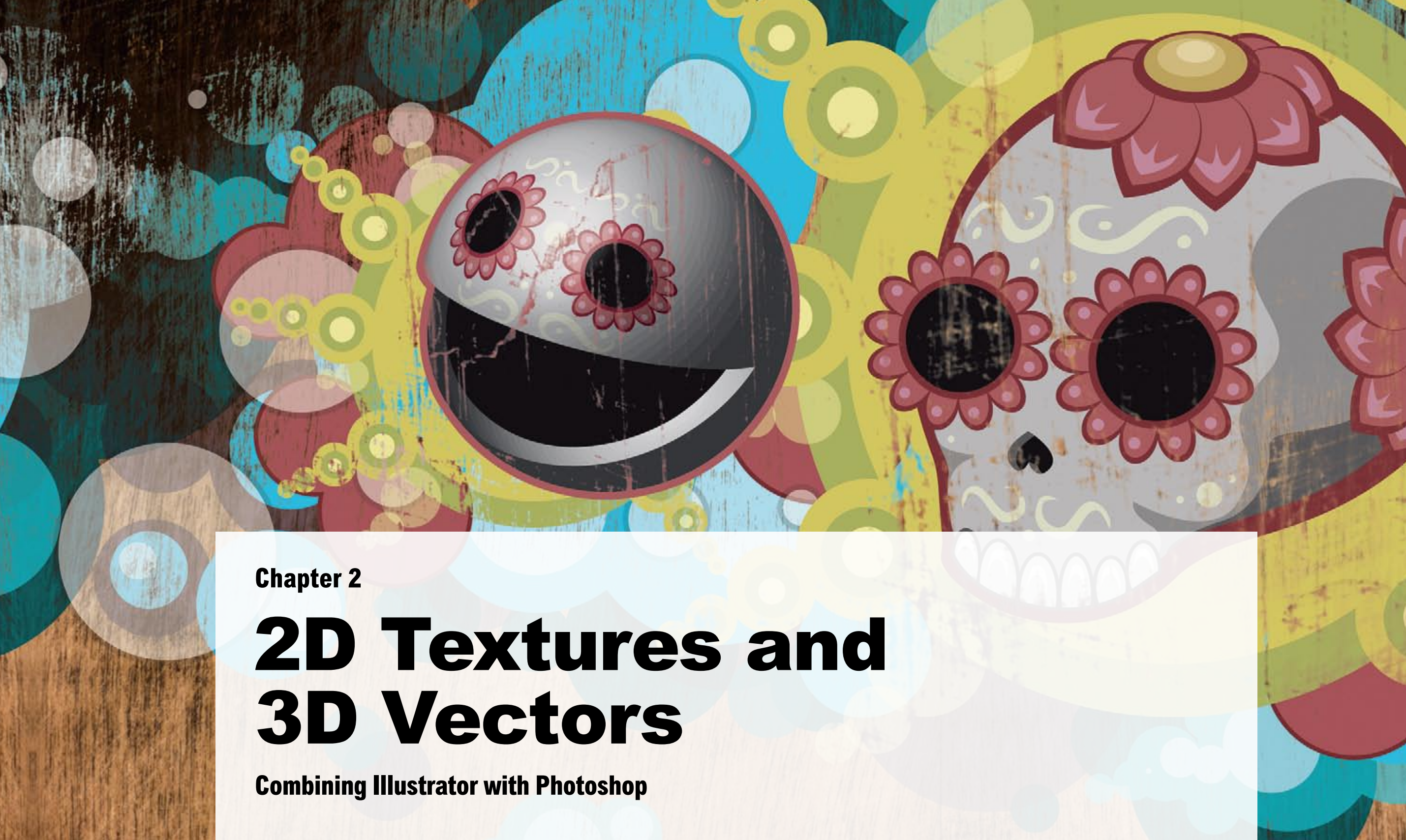
a Pasting paths from Illustrator into a Photoshop document allows us to produce a sharp-edged selection border from the highly detailed Illustrator vector art. Then Photoshop paint tools can be used within the selection to introduce a pattern containing various soft, graduated colors.

b Pasting art as shape layers gives you the option of duplicating your layers and reversing the shape area effects by methodically deleting path components. This is an excellent way to create solid color fill layers to match up with your outline art.

c Introducing painted strokes as shading into the Photoshop file allows us to soften the harsh, solid, vector appearance of working with shape layers. Underlying shape layer contents can provide the basis for selection borders, allowing you to constrain your painting to an area defined by a selection border.

d By working with different shape area options and introducing new path components to your shape layers, you are able to selectively reveal shape layer content differently from layer to layer, as we did here with the teacup and steam layers.

e By duplicating the flower group, altering the fill color of the shape layer, editing the hue of the paint layer, adjusting size, and repositioning, we are able to scatter numerous variations of the same flower throughout the scene.



Chapter 2

2D Textures and 3D Vectors

Combining Illustrator with Photoshop

Illustrator is generally the first choice of any digital artist, designer, or illustrator for creating sharp vector graphics. However, let's not forget about the myriad of vector tools and features in Photoshop. Even though they're not as comprehensive as those provided by Illustrator, they are powerful and extremely useful. The trick is to know when to use each program and for what purpose. In some cases it is logical, and convenient, to create and edit basic vector shapes in Photoshop. However, in instances where 3D vector technology, symbols, or clipping masks are required, Illustrator is the tool you're going to need to reach for.

An unfortunate byproduct of working with vectors is that an inherently digital or perfect look often prevails at the end of it all. Things can feel too perfect, too crisp, or too sharp. An excellent way to remedy this is to explore a variety of masking methods within both Illustrator and Photoshop, using image-based textures as your mask resources to distress your vectors in a convincing manner. This allows you to combine distressed textures from pixel-based imagery, with the crisp and clean artwork created with vector tools. The result is something entirely unique that resides in the mysterious realm between vectors and pixels. Getting comfortable with this newfound middle ground is essential to creating imagery that transcends the signature appearance of the tools you use.

Versions

Photoshop CS4
Illustrator CS4

Requirements and Recommendations

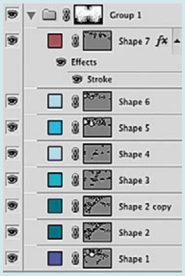
In addition to Photoshop, you'll need a copy of Illustrator. If you don't have a copy of Illustrator, a trial version can be downloaded from www.adobe.com.

What you'll learn in this chapter

Creative Techniques and Working Methods

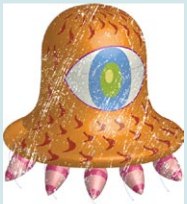
Masking vectors in Photoshop

If you're holding this book in your hands, there's a good chance that you are aware of the possibilities of combining vectors and pixels in Photoshop. If you aren't aware of these possibilities, worry not; that awareness will settle in soon after you begin to read this chapter. In any case, Photoshop houses a plethora of vector creation and editing tools. And, as exemplified by the first portion of this chapter, there's a lot that you can do with vectors in Photoshop. Also, of equal importance is the fact that there are some great methods that you can employ using Photoshop to mask your vector shapes with image files, combining imagery from within alpha channels with your shape layers via layer masks.

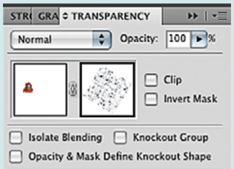

Group 1
Shape 7
Effects
Stroke
Shape 6
Shape 5
Shape 4
Shape 3
Shape 2 copy
Shape 2
Shape 1

Masking vectors in Illustrator

When people think of Illustrator, they generally don't think about masking vectors with images. The capability is there, yet we see that the process is a little different when we compare it to the same task in Photoshop. You need to designate your image as an opacity mask, which will allow you to see through the image's white regions while black regions remain hidden, exactly like the behavior of a layer mask in Photoshop. You can apply an opacity mask to a single object or an entire group. You can also edit the mask independently of your artwork in Illustrator at any time. Again, the same inherent logic prevails in Photoshop when we perform a similar task, yet the procedure is slightly different. All is explained over the following pages.

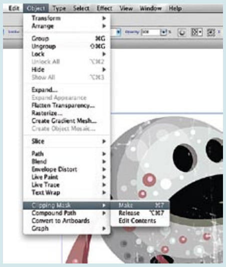


Tools, Features, and Functions


STR
GRA
TRANSPARENCY
Normal
Opacity: 100 %
☐ Clip
☐ Invert Mask
☐ Isolate Blending
☐ Knockout Group
☐ Opacity & Mask Define Knockout Shape

Transparency palette

This is the place in Illustrator where you can convert a placed image into an opacity mask. In addition, by clicking the mask thumbnail, you enter a mode in which you can edit the mask itself without affecting the masked artwork.

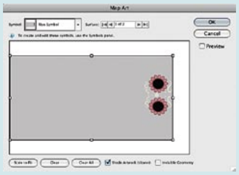

Edit Object Type Select Effect View Window Help
Transform
Arrange
Group
Ungroup
Lock
Unlock All
Hide
Show All
Expand...
Expand Appearance
Flatten Transparency...
Rasterize...
Create Gradient Mesh...
Create Object Mosaic...
Slice
Path
Blend
Envelope Distort
Live Paint
Live Trace
Text Wrap
Clipping Mask
Compound Path
Convert to Artboards
Graph
Make
Release
Edit Contents

Clipping masks

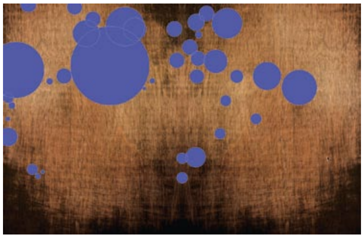
Just like a vector mask in Photoshop, a clipping mask in Illustrator uses the structure of a vector shape to clip or mask artwork. You can mask a single object or a group. A clipping mask affects only the item that is directly beneath it in the Layers palette.

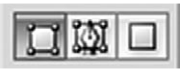
Symbols and 3D

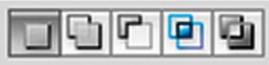
You might already know that Symbol technology is a great way to manage numerous instances of the same thing in Illustrator. However, you might not be aware of the fact that Symbols can be mapped onto 3D effects, creating a surface texture or material on the resulting object.

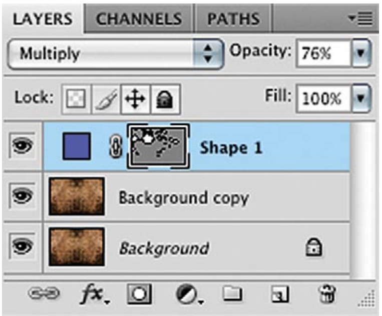

Map Art
Symbol:
Surface:
OK
Cancel
☐ Preview

PART ONE: Building the background



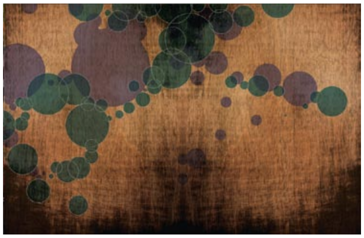


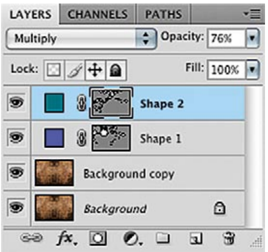




LAYERS CHANNELS PATHS
Multiply
Opacity: 76%
Lock:
Fill: 100%
Shape 1
Background copy
Background

1 Open the *background.psd* file. Duplicate the background layer by dragging it onto the Create A New Layer button at the bottom of the Layers palette. Change the blending mode of the duplicate layer to Soft Light and reduce the opacity to 47%. Click the foreground color swatch in the Toolbar and select a bluish-purple foreground color from the picker. Select the Ellipse shape tool and ensure that it is set to create shape layers in the Tool Options bar. Click and drag while holding down the Shift key to create a circular shape within the new shape layer. Then click the Add To Shape Area button in the Tool Options bar. With this operation enabled, continue to click and drag while holding down the Shift key to add a number of other circles to the same shape layer. Try to create something that resembles what is shown here.





LAYERS CHANNELS PATHS
Multiply
Opacity: 76%
Lock:
Fill: 100%
Shape 2
Shape 1
Background copy
Background

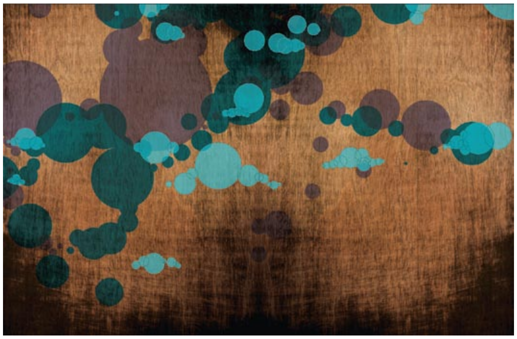
2 Change the blending mode to multiply and then reduce the opacity of the layer to 76%. Click the Create New Shape Layer button in the Tool Options bar. Select a teal-blue foreground color from the picker and then Shift-click the canvas to create a new teal circle within a new shape layer. You'll notice that the new shape layer has a multiply blending mode and an opacity setting of 76%, just like the previous shape layer. Again, click the Add To Shape Area button in the Tool Options bar. With this operation enabled, click and drag repeatedly while holding down the Shift key until the canvas looks something like the following.

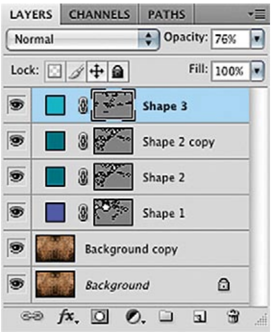
Project files

All the files needed to follow along with this chapter and create the featured image are available for download on the accompanying Website, in the project files section. Visit www.beyondphotoshopthebook.com.

Shape size and position

If you want to move an individual shape within a shape layer, simply use the Path selection tool to click it and then drag it to the desired position. While an individual shape is selected, you can resize it via Edit > Free Transform at any point.



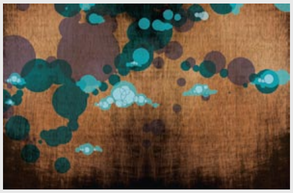


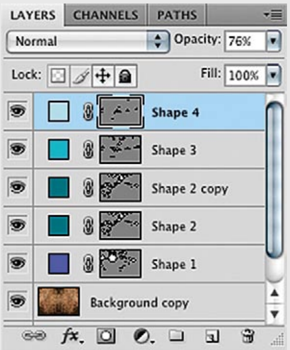
Normal
Opacity: 76%
Fill: 100%
Shape 3
Shape 2 copy
Shape 2
Shape 1
Background copy
Background

3 Duplicate the layer by dragging it onto the Create A New Layer button at the bottom of the Layers palette. Change the blending mode of the duplicate layer to color. Again, click the Create New Shape Layer button in the Tool Options bar. This time select a slightly lighter blue foreground color from the picker and then Shift-click the canvas to create a new teal circle within a new shape layer. After that, click the Add To Shape Area button in the Tool Options bar. With this operation enabled, click and drag repeatedly while holding down the Shift key until you've created some cloud shapes like those shown here. Change the blending mode of this shape layer to normal.

More circular shapes

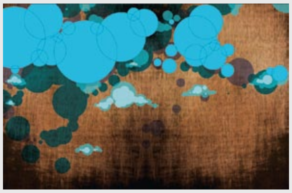
Repeat this process a few more times to build up circular shapes on a series of layers.

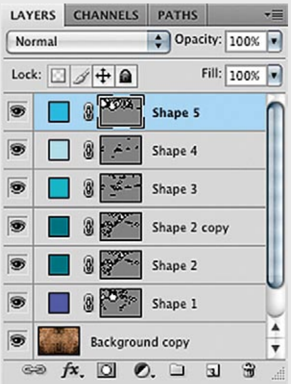




Normal
Opacity: 76%
Fill: 100%
Shape 4
Shape 3
Shape 2 copy
Shape 2
Shape 1
Background copy

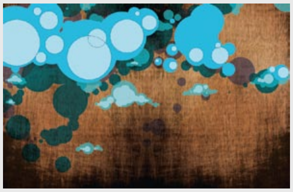
1 Repeat this entire process to create a new shape layer with a Normal blending mode and an opacity setting of 76%. Ensure that it contains a number of overlapping light blue circles. Position the shapes over the shapes on the underlying layer, making them a little bit smaller to look like highlight areas on your clouds.

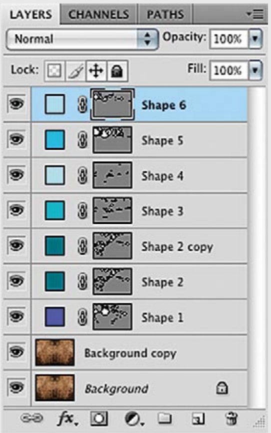




Normal
Opacity: 100%
Fill: 100%
Shape 5
Shape 4
Shape 3
Shape 2 copy
Shape 2
Shape 1
Background copy

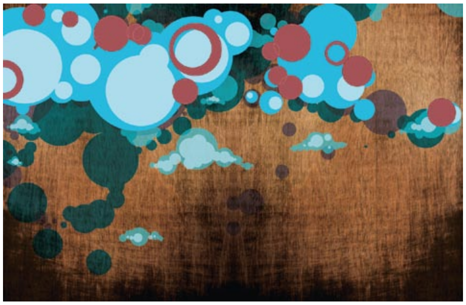
2 Now use the same procedure to create another shape layer that is a slightly darker blue color. Create larger shapes this time and place them closer to the top of the canvas, as shown here. Set the blending mode of this shape layer to Normal and the opacity to 100%.

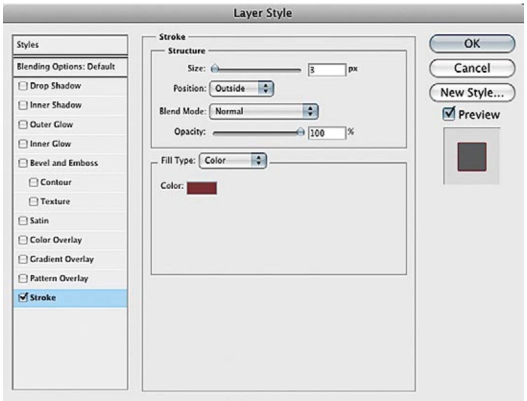




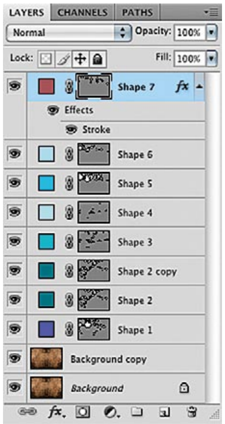
Normal
Opacity: 100%
Fill: 100%
Shape 6
Shape 5
Shape 4
Shape 3
Shape 2 copy
Shape 2
Shape 1
Background copy
Background

3 Again, create another shape layer. This time use a light blue color like the one you used for the cloud highlights. Use the same approach to hint at highlights over the shapes on the previous layer. Like the previous layer, this one's blending mode should be set to Normal and the opacity should be set to 100%.



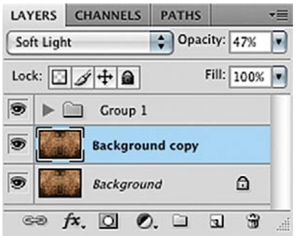

Layer Style
Styles
Blending Options: Default
☐ Drop Shadow
☐ Inner Shadow
☐ Outer Glow
☐ Inner Glow
☐ Bevel and Emboss
☐ Contour
☐ Texture
☐ Satin
☐ Color Overlay
☐ Gradient Overlay
☐ Pattern Overlay
☑ Stroke
OK
Cancel
New Style...
☑ Preview

Stroke
Structure
Size: 3 px
Position: Outside
Blend Mode: Normal
Opacity: 100 %
Fill Type: Color
Color: 🟥

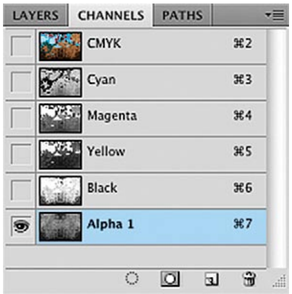

LAYERS CHANNELS PATHS
Lock:
Shape 7
Effects
Stroke
Shape 6
Shape 5
Shape 4
Shape 3
Shape 2 copy
Shape 2
Shape 1
Background copy
Background

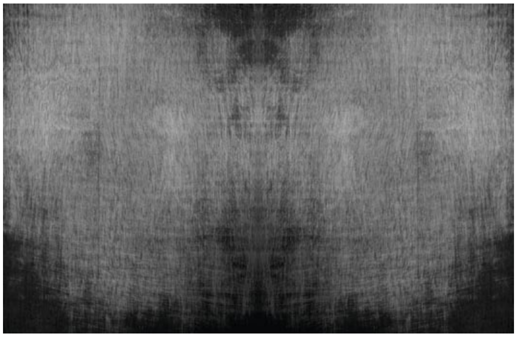
Normal
Opacity: 100%
Fill: 100%

4 Repeat the same process one more time to create a shape layer that contains a number of light red circles, some of which overlap. However, to make this shape layer different from the rest, click the Subtract From Shape Area button in the Tool Options bar and then create some smaller circle shapes that overlap a few larger ones on this layer, to punch holes in them. After doing that, ensure that the layer is still targeted and then select the Stroke option from the Add a Layer Style menu at the bottom of the Layers palette. In the Layer Style dialog box, use the size slider to specify a nice, thick stroke, then click the color swatch to access the picker. Select a dark red color and click OK. Then, after exiting the picker, click OK to apply the stroke to your layer.

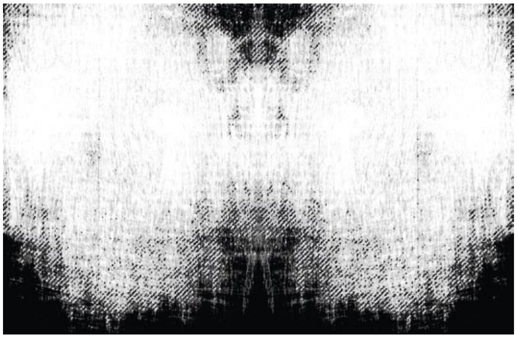

LAYERS CHANNELS PATHS
Lock:
Group 1
Background copy
Background

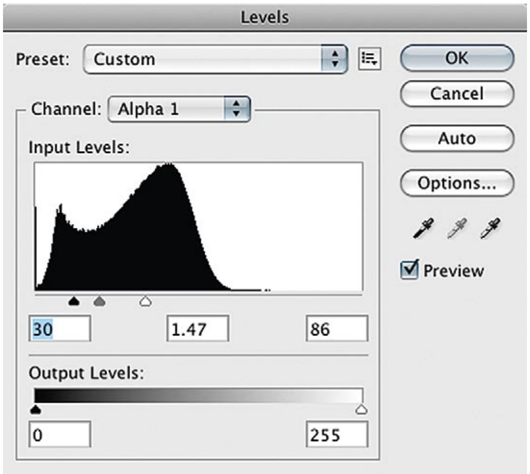
Soft Light
Opacity: 47%
Fill: 100%


LAYERS CHANNELS PATHS
CMYK ⌘2
Cyan ⌘3
Magenta ⌘4
Yellow ⌘5
Black ⌘6
Alpha 1 ⌘7



5 If your top shape layer is not currently targeted in the Layers palette, go ahead and click it to target it. Next, Shift-click the bottom shape layer to target all the shape layers. When all the shape layers are targeted, press Control-G (or Command-G) to group them. After the layers are grouped, target either the backgound layer or the background copy layer. Press Control-A (or Command-A) to select all and then press Control-C (or Command-C) to copy the selected contents. In the Channels palette, click the Create New Channel button. With the new channel targeted, press Control-V (or Command-V) to paste the copied art into the new channel.





Levels

Preset: Custom

Channel: Alpha 1

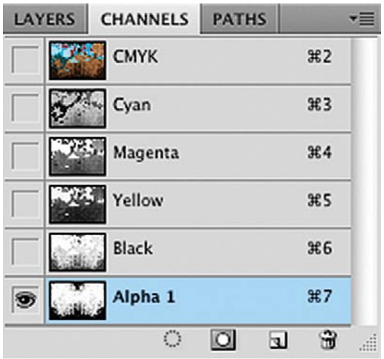
Input Levels:

30 1.47 86

Output Levels:

0 255

☑ Preview



CMYK ⌘2

Cyan ⌘3

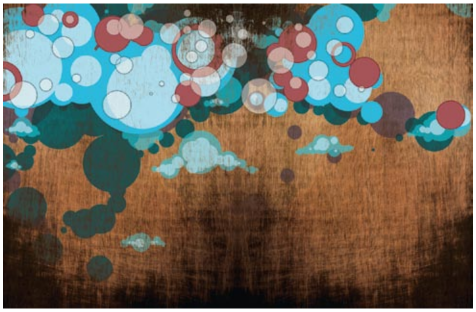
Magenta ⌘4

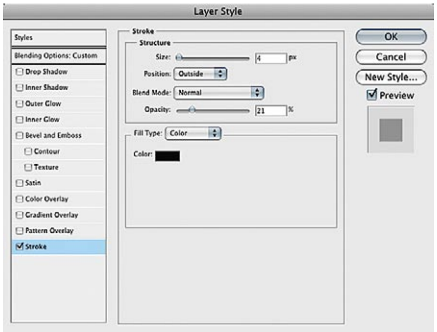
Yellow ⌘5

Black ⌘6

Alpha 1 ⌘7

6 Ensure that the new channel is targeted and then press Control-L (or Command-L) to access Levels. In the Levels dialog box, adjust the input levels sliders drastically until the image within the channel is almost completely void of midtones, leaving behind a simple and drastic black-and-white image in the channel. Click OK and then Control-click (or Command-click) on the channel's thumbnail to load a selection from it.





Layer Style

Styles

Blending Options: Custom

☐ Drop Shadow
☐ Inner Shadow
☐ Outer Glow
☐ Inner Glow
☐ Bevel and Emboss
☐ Contour
☐ Texture
☐ Satin
☐ Color Overlay
☐ Gradient Overlay
☐ Pattern Overlay
☑ Stroke

Stroke

Structure

Size: 4 px

Position: Outside

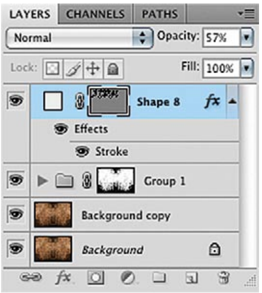
Blend Mode: Normal

Opacity: 21 %

Fill Type: Color

Color:

☑ Preview



Normal Opacity: 57%

Lock: Fill: 100%

Shape 8

Effects

Stroke

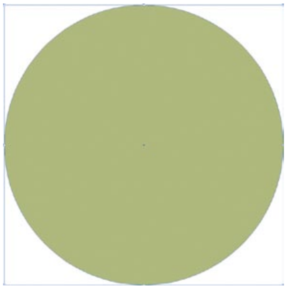
Group 1

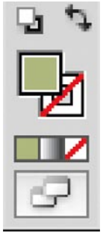
Background copy

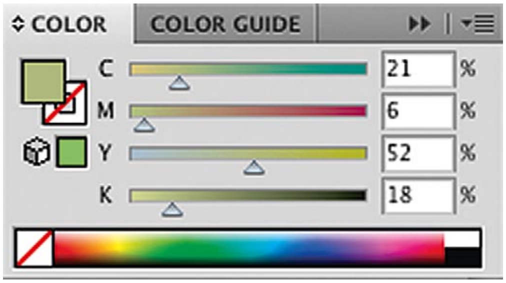
Background

7 While the selection is active, return to the Layers palette and target the group you created previously. With the group targeted and the selection active, click the Add Layer Mask button at the bottom of the Layers palette to mask the group. Selected areas will remain visible while nonselected areas are masked. Now create one final shape layer that contains a series of overlapping white circles. Reduce the opacity of the layer to 57% and then add a Stroke Effect from the Add A Layer Style menu. Enter a Size value that is similar to what you used for the last stroke effect. Then click the color swatch to access the picker. Select a black color from the picker and click OK. Now reduce the opacity of the stroke to 21% and click OK to apply the layer style.

PART TWO: Creating the skull

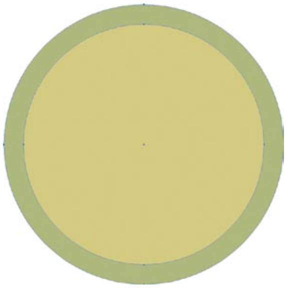


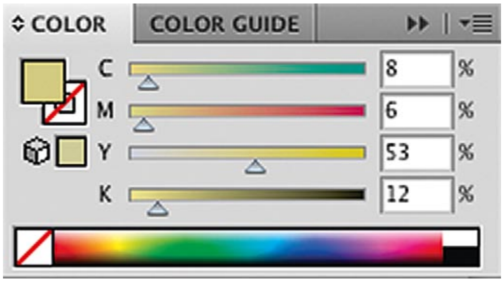




C 21 %
M 6 %
Y 52 %
K 18 %

8 Launch Illustrator and create a new document by pressing Control-N (or Command-N). The size of the artboard and the document color profile do not matter for what we're going to do here. Simply go ahead and click OK when the New Document dialog box appears. Next, to avoid visual distraction as you work, choose View > Hide Artboards from the menu, to hide the artboard. Select the Ellipse tool and Shift-drag to create a large circle. While the circle remains selected, click the Fill swatch in the Toolbar to select the Fill attribute as well as open the Color palette if it is not currently visible. Choose a light green color from the CMYK spectrum at the bottom of the palette and then tweak it with the sliders until it resembles the color shown here.



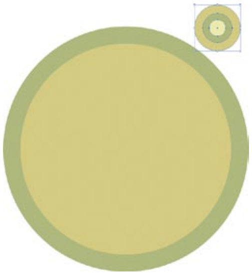


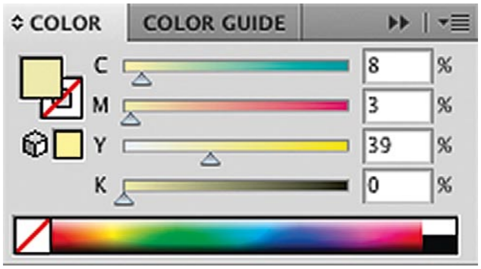
C 8 %
M 6 %
Y 53 %
K 12 %

9 Shift-drag again to create another, smaller circle that overlaps the first. With the second circle selected, edit the color in the Color palette so that the green becomes lighter and less blue, more of a khaki yellow color. Use the Select tool to Shift-click the other circle to select them both, then choose the Horizontal Align Center and Vertical Align Center options in the Align palette to align the two circles.

Color palette sliders

Depending on how you have Illustrator set up, you might see something other than CMYK sliders in the Color palette. If your color sliders are not appearing in your Color palette as they are shown here, simply go to the Color palette menu and choose the CMYK option.



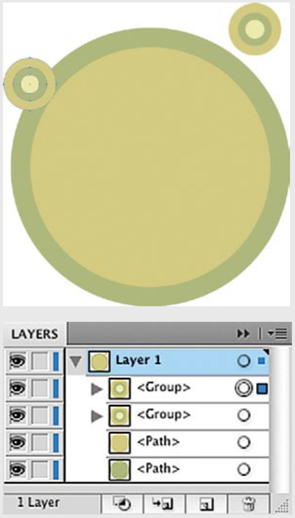


C 8 %
M 3 %
Y 39 %
K 0 %

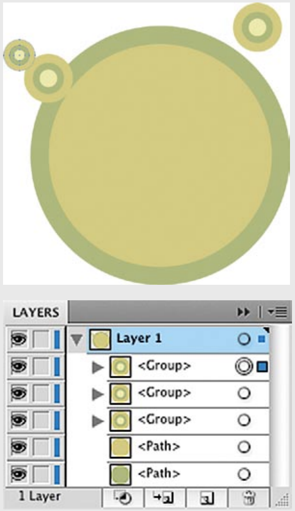
10 At this point, both circles should still be selected. Shift-click the green circle with the Selection tool to deselect it, leaving the yellow circle selected. Alt-drag (or Option-drag) the circle upward and to the right. Shift-drag one of the corners of the bounding box inward, considerably reducing the size. Draw another, slightly smaller circle that overlaps it and, while it is selected, click the original green circle with the Eyedropper tool to change the fill color of this circle to green as well. Create one more slightly smaller circle that overlaps, and create a light yellow fill color for it in the Color palette. Select all three small circles and again, then click the Horizontal Align Center and Vertical Align Center options in the Align palette.

A group of groups

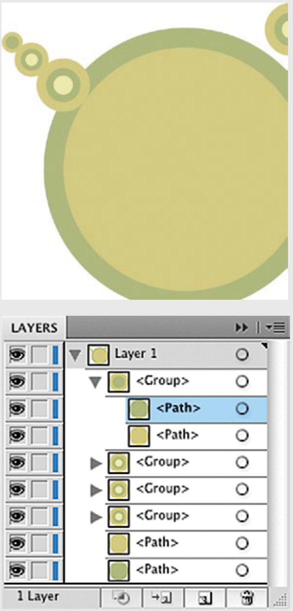
Begin to create and edit a shape that consists of groups of grouped circles.



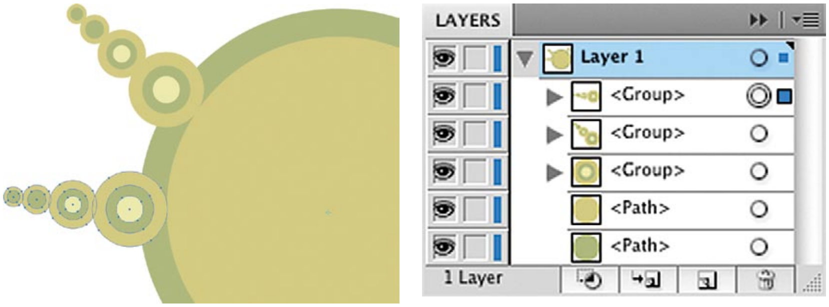
1 While all three aligned circles are selected, press Control-G (or Command-G) to group them. Hold down the Alt (or Option) key and drag the group to the left and slightly downward, as shown here.



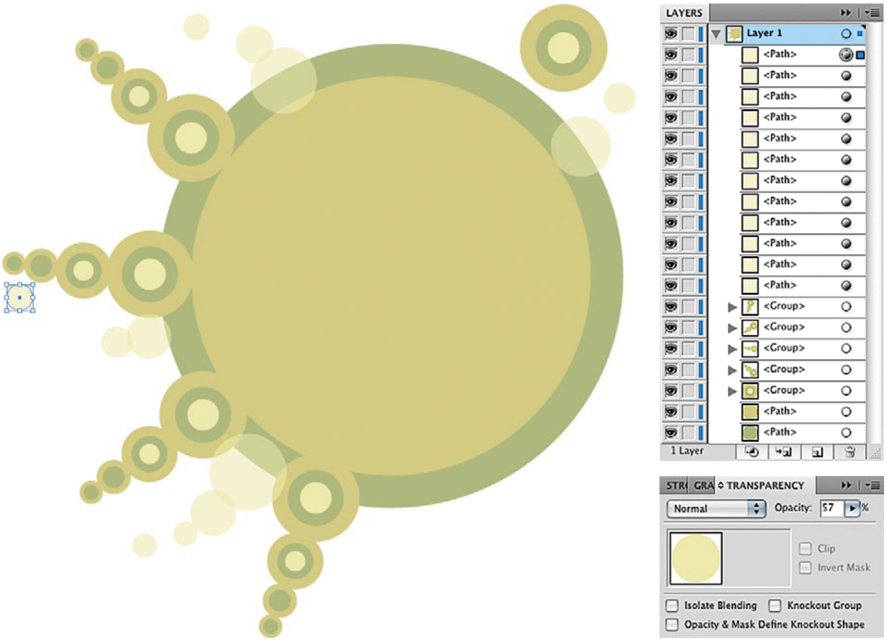
2 Now hold down the Alt (or Option) key as you drag this group upward and to the left, duplicating it. Use the Selection tool to Shift-drag a corner point of the bounding box inward to reduce the size. Position the duplicated group as shown here.



3 Perform this same operation again so that there is another, reduced group oriented on this implied diagonal rule. Expand the newest group in the Layers palette, and then click the circular icon on the light yellow circle's sublayer to target it within the group. Press the Delete key to remove it.



11 Create a duplicate of this edited group. Place it in the upper left like the others and reduce it in size. Select all these diagonally aligned groups and then group them into a single group. Ensure that the new group is selected and then select the Rotate tool from the Toolbar. Click once in the center of the large circle to specify this as the origin point around which the rotation will occur. An icon will remain in this area after you click. Then click the selected group and drag downward while holding down the Alt (Option) key. This will create a duplicate of the group while performing the rotate operation.

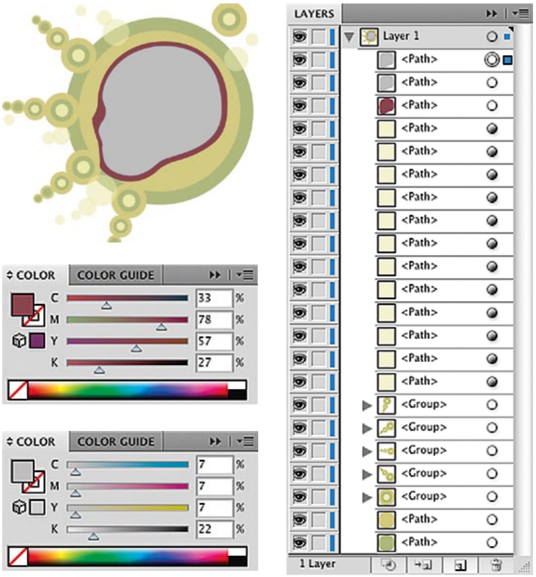


Normal
Opacity: 57 %

☐ Clip
☐ Invert Mask
☐ Isolate Blending ☐ Knockout Group
☐ Opacity & Mask Define Knockout Shape

12 Repeat this process a few more times, rotating and duplicating the group around the larger circle as shown here. Create a new circle shape at the upper left of the original group that you rotated. While the circle is selected, use the Eyedropper tool to click any one of the light yellow circles within one of your groups to apply the light yellow fill color to your currently selected circle. In the Transparency palette, reduce the opacity of the object to 57%. Use the Selection tool to Alt-drag (or Option-drag) the circle, copying it to a new position. Then Shift-drag a corner point of the bounding box inward to resize it proportionately. After that, Alt-drag (or Option-drag) this circle to a new position and resize it as well. Repeat this process over and over again until there is a cluster of circles resembling what is shown here.

13 Use the Pen tool to create a closed shape that will indicate a thick outer edge around the skull we'll be creating next. While the object is still selected, assign a red fill attribute via the Color palette. Then use the Pen tool to draw a smaller shape inside the red shape. This will be outer edge of the skull, so take your time here and focus on creating a convincing shape. While the shape is selected, assign a light gray fill attribute in the Color palette. Duplicate the new shape by dragging it onto the Create New Layer button at the bottom of the Layers palette.

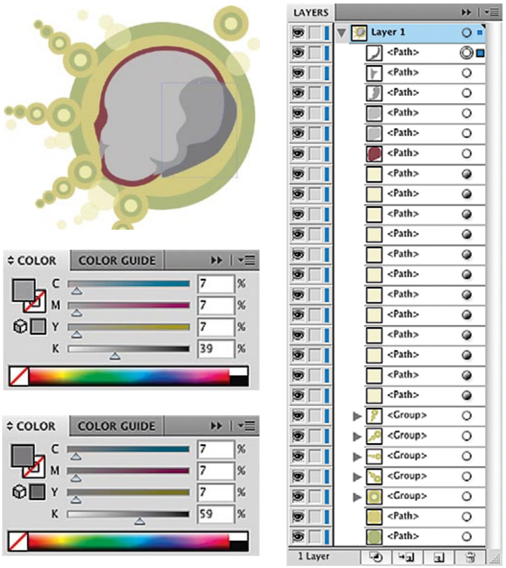


C 33 %
M 78 %
Y 57 %
K 27 %

C 7 %
M 7 %
Y 7 %
K 22 %

Don't feel like drawing?

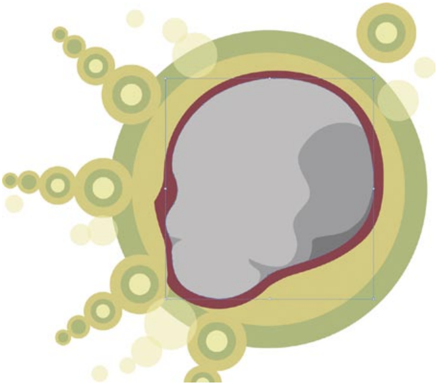
I understand that the Pen tool is not for everybody and that perhaps you want to follow along but you don't want to spend your time drawing paths in Illustrator. If that is the case, the file containing the skull artwork is available in the project files you download for this chapter. The file is called *skull.ai* and includes everything we have worked on in Part 2. So if you don't want to draw all the paths but you'd like to explore the contents of the file in Illustrator, go ahead and open the *skull.ai* file and then skip ahead to Part 4.

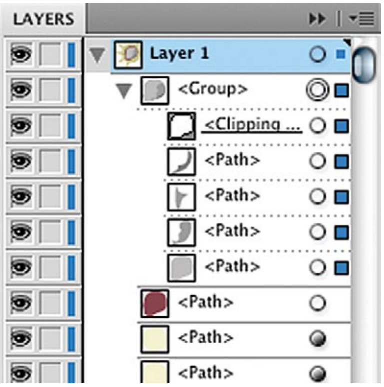


C 7 %
M 7 %
Y 7 %
K 39 %

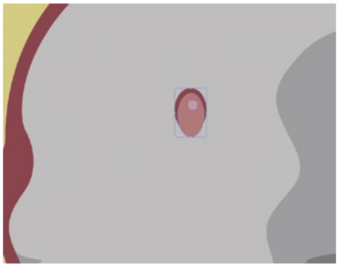
C 7 %
M 7 %
Y 7 %
K 59 %

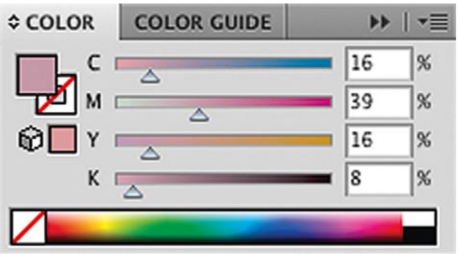
14 Use the Pen tool to draw a couple of closed shapes to indicate shaded areas at the left and right of the skull. Your shapes will have the same gray fill color attribute as the previous shape you created. To change that, select them both and then increase the black slider to 39% in the Color palette. Then draw another shape that is smaller than the one at the right yet overlaps it. After drawing this shape, increase the black slider to 59%.



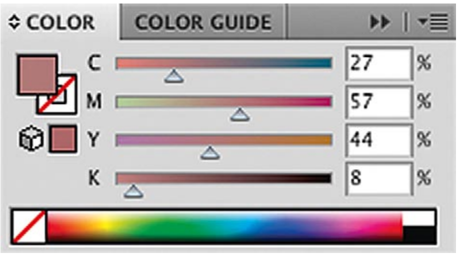


15 In the Layers palette, drag the lowest gray skull sublayer to the top of the stack within the current layer. Do not panic as it obscures the details that you just created; this is temporary. Click the Circular icon at the right of the sublayer to select it. Then Shift-click the circular icons to the right of each sublayer that contains a grey skull component. When they are all selected, choose Object > Clipping mask > Make from the menu. This will group the sublayers and use the top sublayer as a clipping mask. When it clips the layers beneath, it will become invisible, revealing the gray details that you previously obscured.

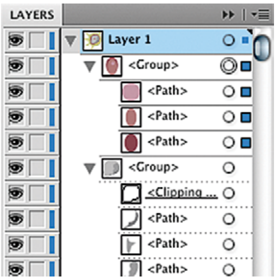




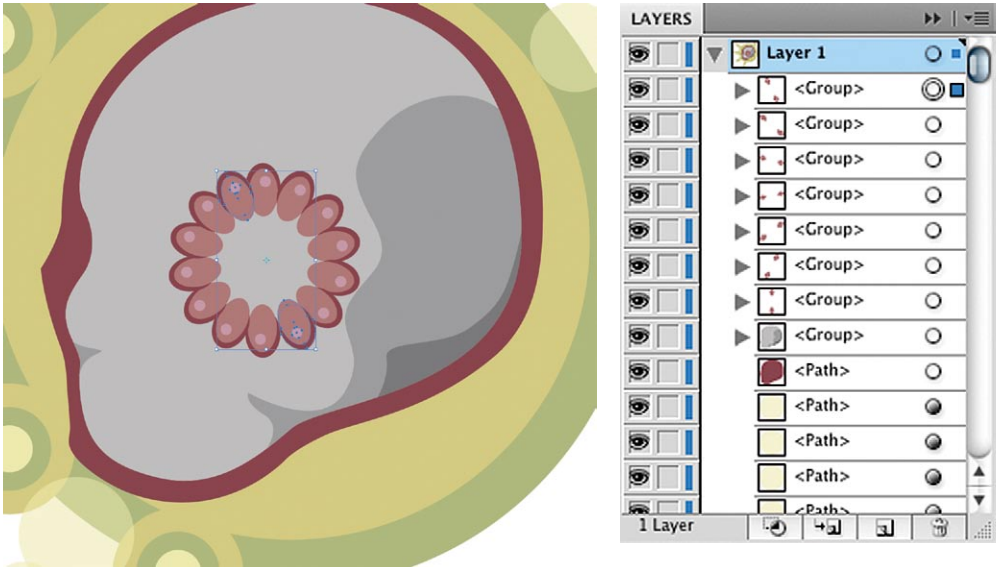
C 16 %
M 39 %
Y 16 %
K 8 %



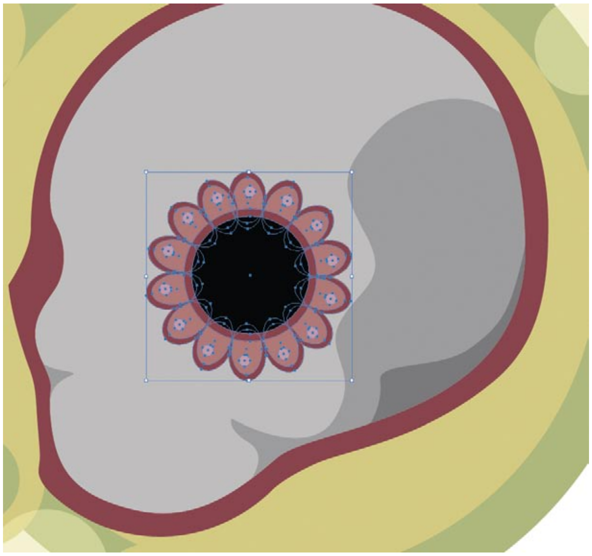
C 27 %
M 57 %
Y 44 %
K 8 %

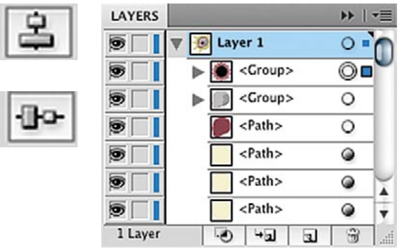


16 Use the Ellipse tool to create a small vertical ellipse. Try to envision where the eye at the right of the skull will be and position your ellipse at the top of it. While the ellipse is selected, use the Eyedropper tool to click the red shape to apply the red fill color to your currently selected ellipse. Create a smaller, somewhat elongated ellipse that overlaps and extends below the bottom of the previous red ellipse. Alter the color sliders in the Color palette until it resembles a dirtier pink color. Now create a small circle that sits inside the top portion of the ellipse, and alter the sliders in the Color palette to change the fill color to a lighter pink. Select both ellipses and the circle, then group them.

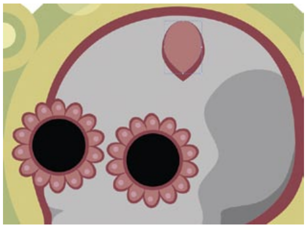


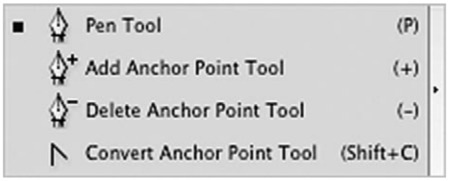
17 Use the Selection tool to drag the group downward on the artboard while holding down the Alt (or Option) and Shift keys. This will create a perfectly aligned duplicate of the group. Now click and drag outside the group's bounding box while holding down the Shift key to rotate it 180 degrees. Select both groups and then group them together. Select the Rotate tool and while the group is currently selected, begin by clicking in the registration point that is visible in the center of the group. Then click and drag while holding down the Alt (or Option) key to create a duplicate group while rotating. Repeat this process over and over again until you have created a circle of grouped shapes similar to what is shown here.

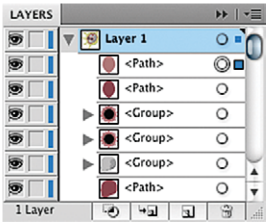




18 Create a large circle in the center of your cluster of groups. Use the Eyedropper tool to click a red object to set the fill color of your new circle to the same. Then create a somewhat small circle with a black fill color attribute. Use the Selection tool to select both circles; then, in the Align palette, click the options that will align both horizontal and vertical centers. After aligning the two circles, you might need to reposition them within your cluster. Go ahead and do so if necessary, but ensure that they are both selected before you move them. Select both circles and all of the ellipse/circle groups that surround them and then group everything into one.




■ Pen Tool (P)
Add Anchor Point Tool (+)
Delete Anchor Point Tool (-)
Convert Anchor Point Tool (Shift+C)


LAYERS
Layer 1
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<Path>
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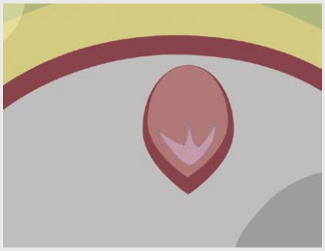
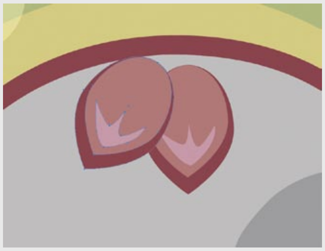
<Group>
<Group>
<Path>
1 Layer

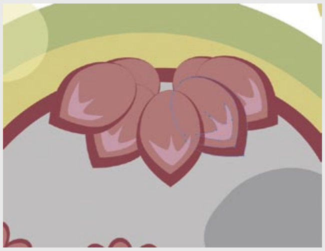
19 Use the Selection tool to drag the group to the left while holding down the Shift key to create a duplicate. Position each group as though they were eyes on the skull. Now create a vertical ellipse shape higher up, above the eye at the right. While the ellipse is selected, select the Convert Anchor Point tool. It is nested with the Pen tool in the Toolbar. Use the Convert Anchor Point tool to click the bottom anchor point, converting it from a curved point to a corner point. Next, use the selection tool to Alt-drag (or Option-drag) the shape upward, duplicating it. Then drag the top-center bounding box point downward to reduce the horizontal size of the new shape so that it fits within the original. While it is selected, use the Eyedropper to click a dirty pink shape to alter the fill color.

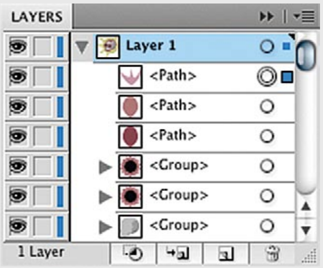
Create an array of petals

Add details and then use rotated duplicates to form the basis of a flower.





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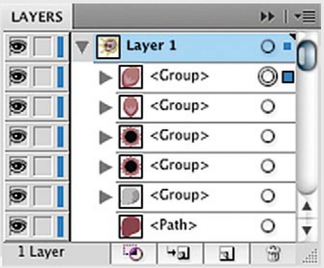
1 Layer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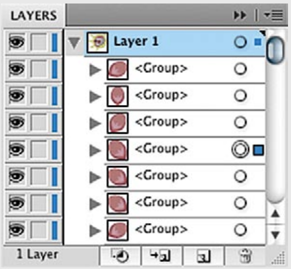
1 Layer


LAYERS
Layer 1
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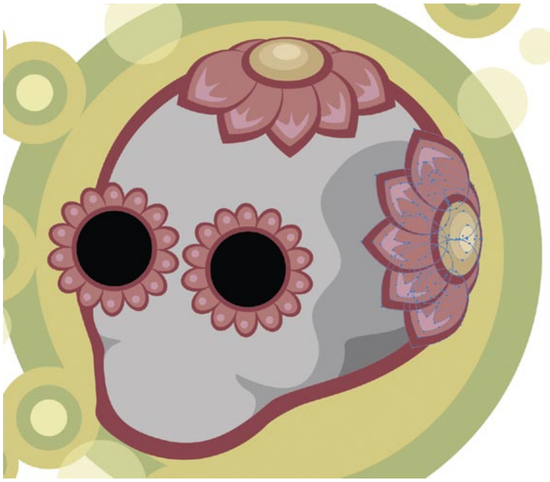
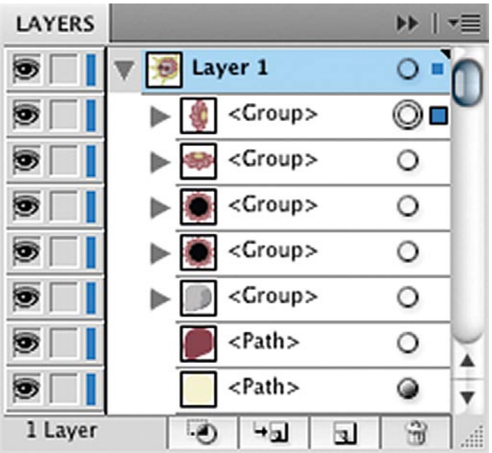
<Group>
<Group>
<Group>
1 Layer

1 Use the Pen tool to draw a small detail like the one shown here. While the detail is selected, click a light pink shape with the Eyedropper tool to assign the same fill color attribute to it.

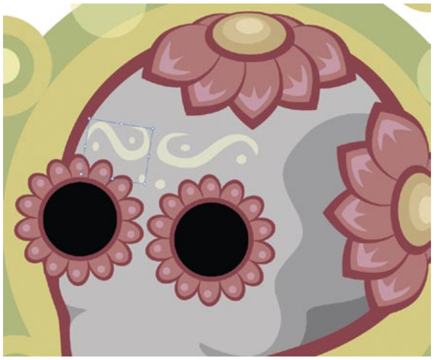
2 Select the three shapes that make up this single petal and group them. Alt-drag (or Option-drag) with the Selection tool to create a duplicate, then click and drag just outside a corner point of the bounding box to rotate the duplicate group slightly.

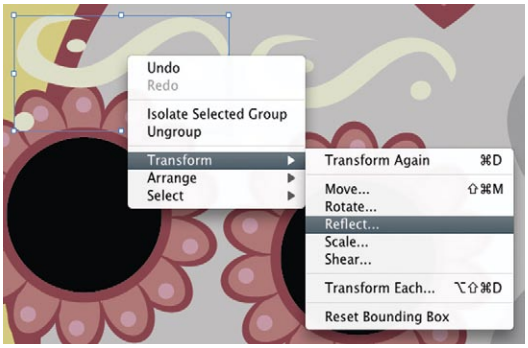
3 Repeat this process a number of times to create duplicates and rotate them. Position them as though they were petals on a flower. Drag groups up and down within the Layers palette to control the way they overlap each other.

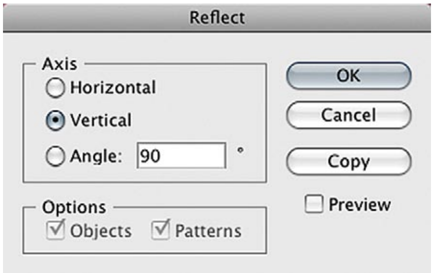



LAYERS
Layer 1
<Group>
<Group>
<Group>
<Group>
<Group>
<Path>
<Path>
1 Layer

20 Draw an ellipse over the top center area of your new flower. While it is selected, use the Eyedropper to click a red area to set the fill color attribute to red. Then draw a smaller ellipse and set the fill attribute to the yellow-green color via the Color palette. Draw a smaller one inside this one and change the fill color attribute to a lighter color. Then do it one more time again, using an even lighter fill color. When you're finished, select all these ellipses as well as all the petal groups and then group everything into a single group by pressing Control-G (or Command-G). Next, Alt-drag (or Option-drag) the group to the right. Rotate it while holding down the Shift key and then position this duplicate group over the back of the skull.




Undo
Redo
Isolate Selected Group
Ungroup
Transform
Arrange
Select
Transform Again ⌘D
Move... ⇧⌘M
Rotate...
Reflect...
Scale...
Shear...
Transform Each... ⌥⇧⌘D
Reset Bounding Box

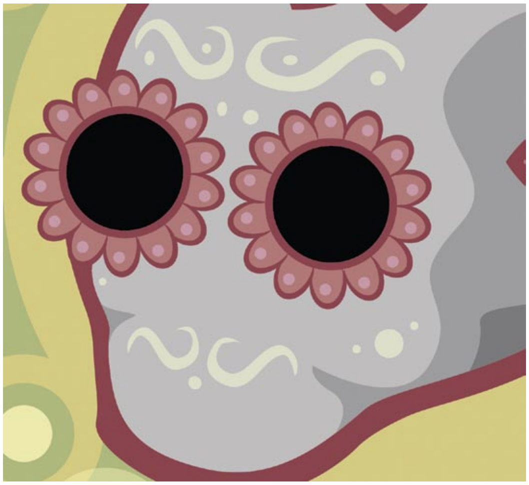

Reflect
OK
Cancel
Copy

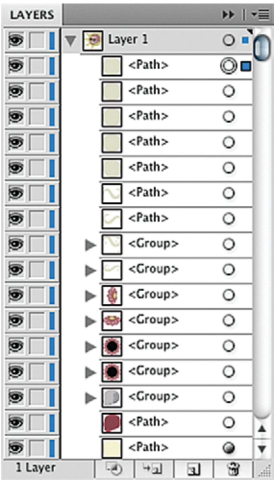
Axis
○ Horizontal
● Vertical
○ Angle: 90 °

Options
☑ Objects ☑ Patterns

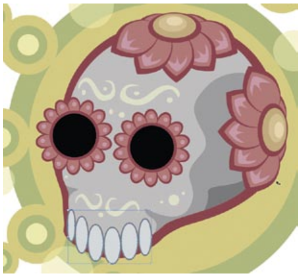
☐ Preview

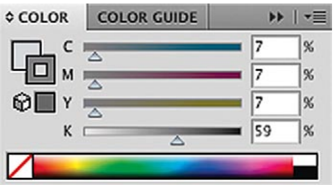
21 Use the Pen tool to create a closed shape that resembles a swirling brow. In the Color palette, assign a light yellow-green fill, similar to that used previously in the center of the flowers. Then use the Ellipse tool to create a few elliptical shapes in its proximity. Select the swirl shape and the ellipses and group them. Use the Selection tool to Alt-drag (or Option-drag) the shape to the left so that it sits above the other eye. Right-click (or Control-click) the duplicated group. When the pop-up menu appears, choose Transform > Reflect. Then, when the Reflect dialog box appears, choose the vertical axis and click OK. Next, use the bounding box handles to distort the shape. Following that, click and drag just outside a corner point to rotate it so that it looks like it belongs there.



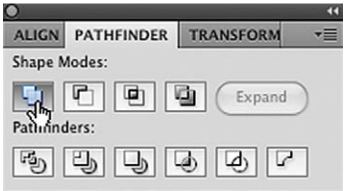


22 Double-click the group above the eye at the right to enter Isolation mode. While in Isolation mode, select just the swirl object and copy it by pressing Control-C (or Command-C). After copying, double-click anywhere else on the artboard to exit Isolation mode. After exiting, press Control-V (or Command-V) to paste the copied swirl. Resize it via the bounding box, and then click and drag outside a bounding box corner point to rotate it. Alt-drag (or Option-drag) this swirl to the left to duplicate it. Resize and rotate it using the same method you used previously, making it appear as though it belongs on the face. Use the Ellipse tool to draw a circle under these objects as well as some other circles and ellipses under the eyes.





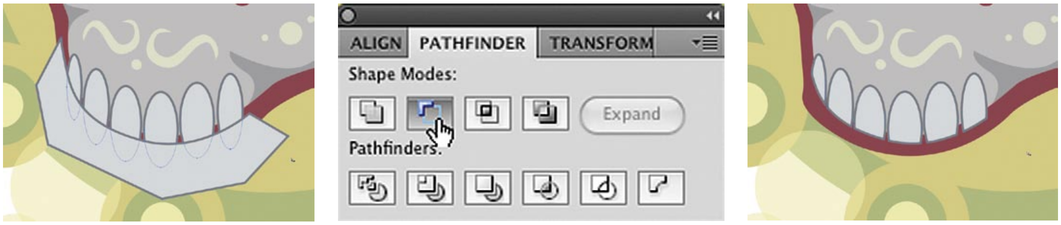
C 7 %
M 7 %
Y 7 %
K 59 %



23 Create a series of ellipses in the area where the teeth should be. Ensure that they extend below the large gray skull shape. Select them all and then assign a light gray fill color attribute in the Color palette. To assign a stroke, click the Stroke icon in either the Toolbar or the Color palette to bring it to the foreground. Then specify a dark gray color in the Color palette. If necessary, feel free to edit the thickness of the stroke in the Strokes palette. While all ellipses are selected, click the Unite option in the Pathfinder palette to unite them into a single object.

Isolation mode

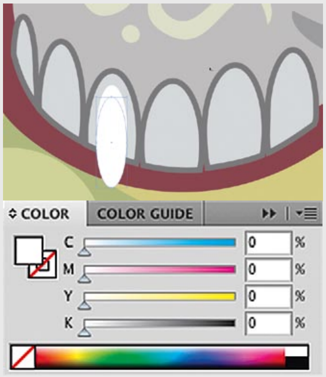
You can isolate a path, group, or object by double-clicking it, choosing Enter Isolation Mode from the Layers palette menu, clicking the Isolate Selected Object button in the Control palette, or right-clicking (or Control-clicking) on it and selecting the Isolate Selected option when it appears. While in Isolation mode, your isolated object, group, or path appears normal, whereas the rest of the artwork is dimmed or faded in compression. Isolation mode allows you to work exclusively with the isolated object, path, or group, leaving the rest of your artwork unaffected. You can exit Isolation mode by double-clicking the artboard, pressing the Esc key, clicking anywhere in the Isolation bar, clicking the Exit Isolation Mode button in the Control palette, or right-clicking (or Control-clicking) the object and choosing the Exit Isolation option when it appears.



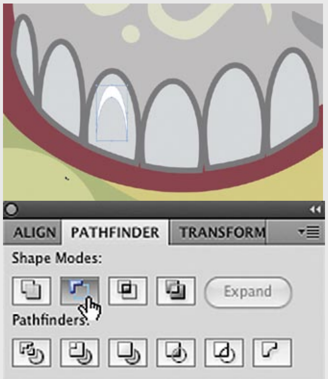
24 While the unified teeth are selected, choose the Make Compound Shape option from the Pathfinder palette menu. After that, click the Expand button in the Pathfinder palette as it becomes available. Next, create a shape that covers the bottom half of the teeth. The top half of this shape should mimic the curve indicated by the underlying skull shape. If you want to see the skull shape clearly, view the artwork in Outline mode by pressing Control-Y (or Command-Y). You can return to Preview mode at any point by typing the same thing. Ensure that the shape is closed and remains selected after you create it. Shift-click the unified teeth shape with the Selection tool to select them as well. While both the teeth and the new shape are selected, choose the Minus Front option from the Pathfinder palette to trim the teeth.

Creating highlights

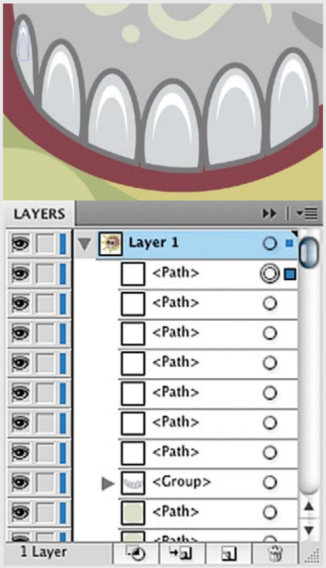
Once again, we'll use elliptical shapes alongside the Pathfinder to create a cluster of custom shapes.



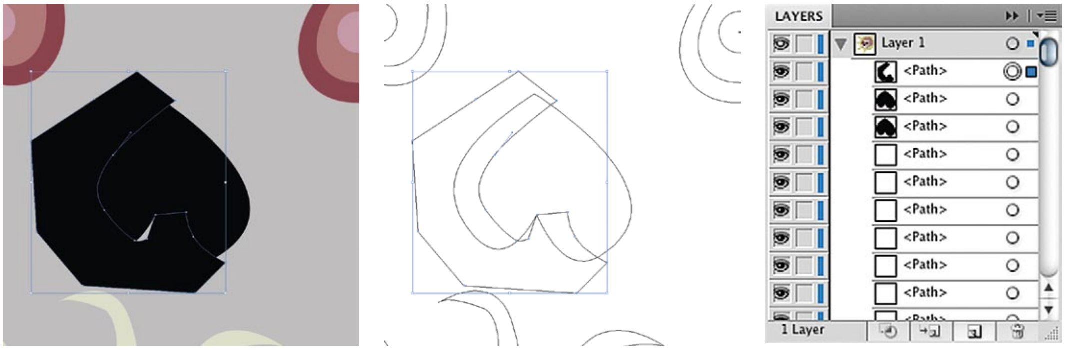
1 Create an elliptical shape that overlaps one of the teeth. In the Color palette, assign a white fill and remove the stroke. Use the Selection tool to Alt-drag (or Option-drag) the ellipse downward, creating a duplicate that overlaps the bottom.



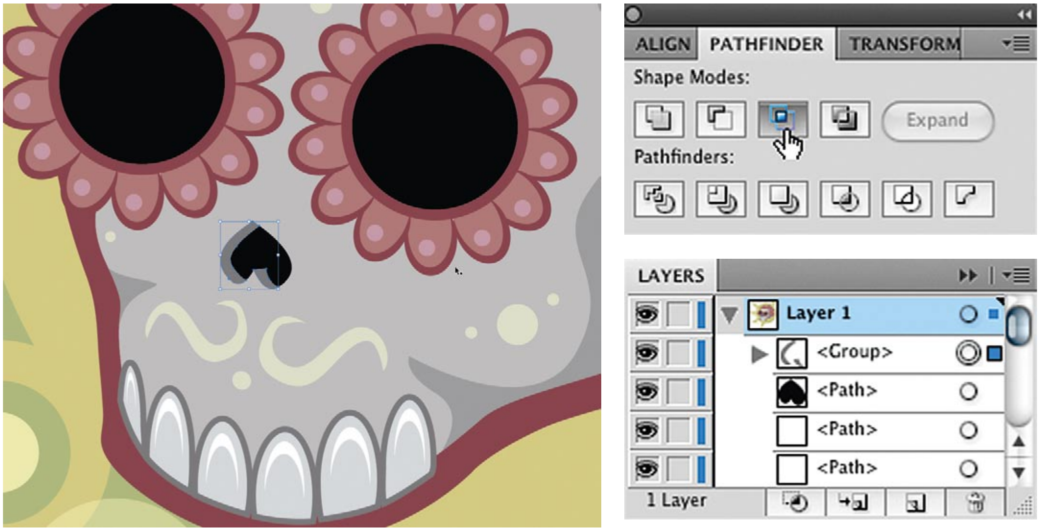
2 While the duplicate ellipse is selected, use the Selection tool to Shift-click the original so that they are both selected. While they are both selected, click the Minus Front option in the Pathfinder palette.



3 Use the Selection tool to drag while holding down the Alt (or Option) key to create duplicates on each tool. Edit the shape and rotation of each duplicate shape via the bounding box handles or by clicking and dragging just outside a corner point.

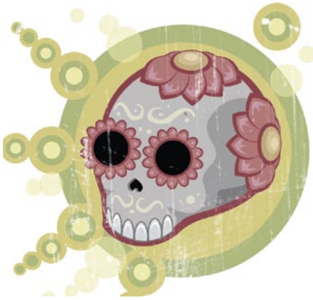


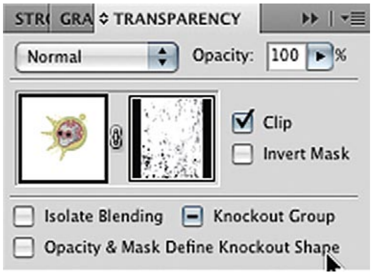
25 Use the Pen tool to draw an upside down heart-shaped nose. Specify a black fill attribute in the Color palette. After you finish creating the shape, duplicate it by dragging it onto the Create New Layer button at the bottom of the Layers palette. Now try to envision this shape as a hole in the skull and envision the thickness of the skull that would be expressed at the edges of the hole. Create a rough shape to indicate that thickness. It should look something like the one shown here, in both Preview and Outline modes. Ensure that you create only one shape, and also ensure that it is closed.



26 With this shape selected, use the Selection tool to Shift-click the upside-down heart shape directly beneath it to select them both. While both are selected, click the Intersect option in the Pathfinder. Then, while the resulting shape remains selected, create a dark gray fill color attribute in the Color palette. Select all by typing Control-A (or Command-A), and then group everything into a single group by typing Control-G (or Command-G).

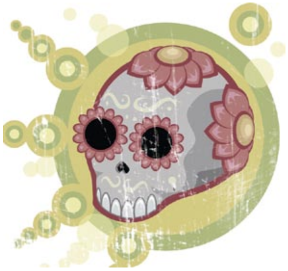
PART THREE: Adding an opacity mask

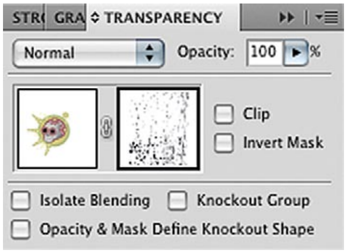




STR GRA ◆ TRANSPARENCY
Normal Opacity: 100 %
☑ Clip
☐ Invert Mask
☐ Isolate Blending ⊟ Knockout Group
☐ Opacity & Mask Define Knockout Shape

27 Choose File > Place from the menu. Navigate to the *mask.jpg* file and click Place. Ensure that the image completely obscures the underlying art. You can move it around with the Selection tool if necessary. After placing the image into the file and positioning it properly, press Control-A (or Command-A) to select both the group and the new image. In the Transparency palette menu, choose the Make Opacity Mask option and you'll immediately see the results of the new image as an opacity mask in both the Transparency palette and on the artboard.





STR GRA ◆ TRANSPARENCY
Normal Opacity: 100 %
☐ Clip
☐ Invert Mask
☐ Isolate Blending ☐ Knockout Group
☐ Opacity & Mask Define Knockout Shape

28 To edit the mask, simply click the Mask thumbnail in the Transparency palette. Uncheck the Clip option because it will hide anything that lies outside the edge parameters of the mask. Feel free to move it around, resize, rotate, or distort it if you like. Try moving it around a bit to see how the black scratches from the image affect what is hidden and what is visible. When you're satisfied, click the artwork thumbnail, not the mask, in the Transparency palette and then press Control-C (or Command-C) to copy the artwork as well as the mask applied to it.

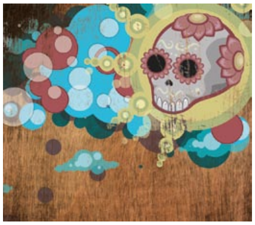
Releasing a mask

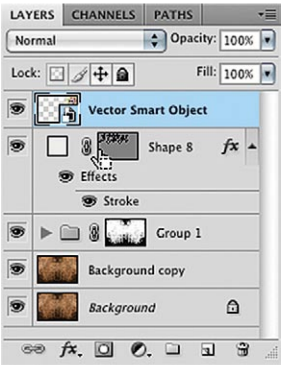
Once an opacity mask is applied, you can release it, undoing the effects and taking it back to the state it was in before it was used to mask your artwork. To release a mask, simply select the artwork to which the mask is applied and then choose the Release Opacity Mask option from the Transparency palette menu.

Illustrator workaround 1

If you are following along with the chapter but are not using Illustrator, you will need to place a couple of files that are pasted into Photoshop from Illustrator on the next page. In step 29, rather than paste, you will need choose File > Place from the menu and then navigate to the *skull.ai* file. Also, instead of pasting the altered artwork as per step 3 of the following boxout, you will need to place it as well using the same method. The name of the file is *background.ai*.

PART FOUR: Incorporating and editing Smart Objects

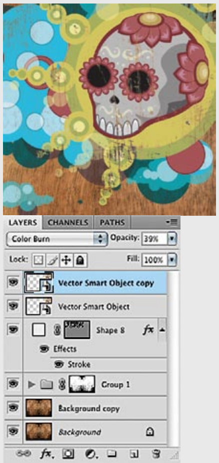



Normal
Opacity: 100%
Fill: 100%
LAYERS
CHANNELS
PATHS
Lock:
Vector Smart Object
Shape 8
Effects
Stroke
Group 1
Background copy
Background

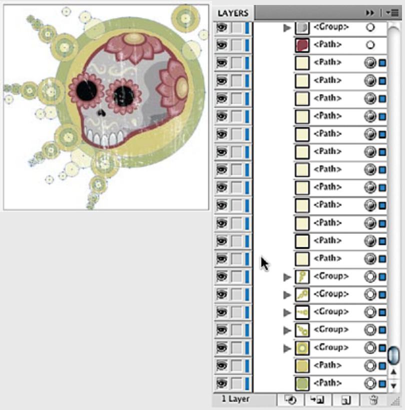
29 Return to your working file, which should still be open in Photoshop. If you have closed it for any reason, now is the time to open it again. Press Control-V (or Command-V) to paste the copied Illustrator art into your working Photoshop file. When the Paste dialog box appears, choose the Smart Object option and click OK. When the Smart Object appears, click inside the bounding box and drag it to the upper-right corner. Shift-drag a corner point outward to increase the size slightly while preserving proportion. When you're happy with the placement, press the Enter key. The newly pasted Smart Object should appear at the top of the stack in the Layers palette. If for any reason it appears lower down, simply drag it to the top. Immediately you'll notice how the opacity mask affects the visibility of the artwork.

Harvesting elements

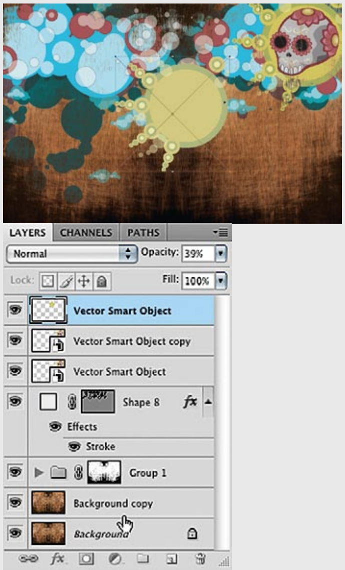
Pick bits and pieces out of existing Smart Objects to create additional elements in the composition.


Color Burn
Opacity: 39%
Fill: 100%
LAYERS
CHANNELS
PATHS
Lock:
Vector Smart Object copy
Vector Smart Object
Shape 8
Effects
Stroke
Group 1
Background copy
Background

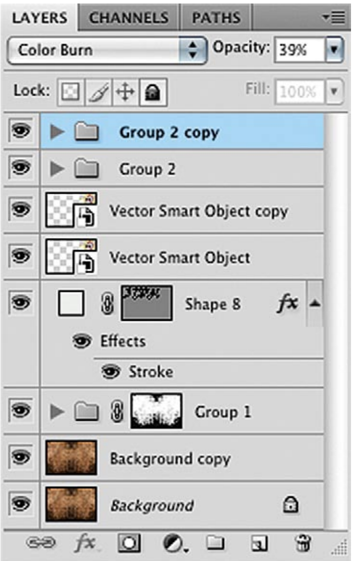
1 Duplicate the skull Smart Object by dragging it onto the Create A New Layer button at the bottom of the Layers palette. Change the blending mode to Color Burn and reduce the opacity to 39%. This will help deepen and saturate the color of the Smart Object within the Photoshop composition.


LAYERS
<Group>
<Path>
<Path>
<Path>
<Path>
<Path>
<Path>
<Path>
<Path>
<Path>
<Path>
<Path>
<Path>
<Path>
<Group>
<Group>
<Group>
<Group>
<Group>
<Path>
<Path>
1 Layer

2 Double-click either Smart Object to open it in Illustrator. In the Layers palette, click the circular target next to one of the circular background elements to select it. Then click all the targets that correspond with all the other background elements until all the circles and groups that make up the background are selected.


Normal
Opacity: 39%
Fill: 100%
LAYERS
CHANNELS
PATHS
Lock:
Vector Smart Object
Vector Smart Object copy
Vector Smart Object
Shape 8
Effects
Stroke
Group 1
Background copy
Background

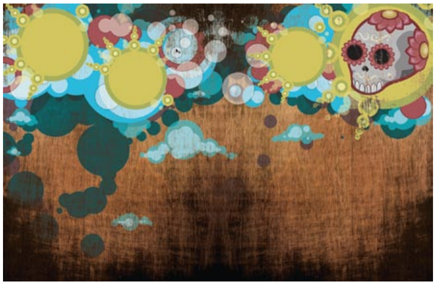
3 Copy the selected objects and groups and close the Illustrator file. Whatever you do, do *not* save changes or you will alter the skull object. Return to Photoshop and paste the copied circles and groups into your file as a Smart Object.


LAYERS | CHANNELS | PATHS

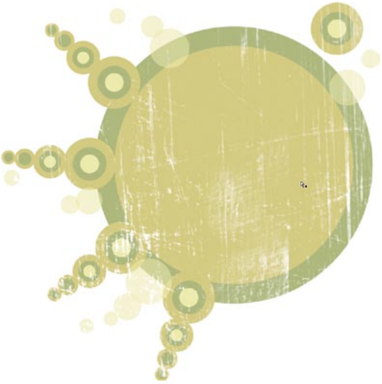
Color Burn   Opacity: 39%

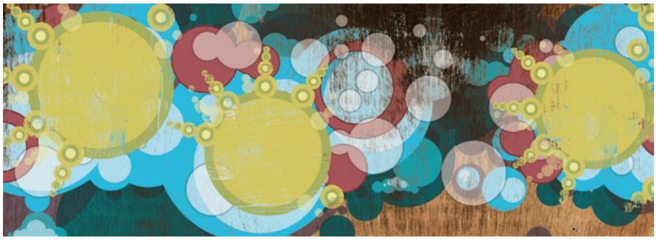
Lock: Fill: 100%

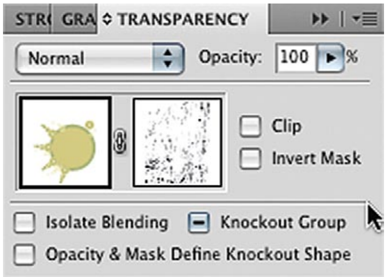
Group 2 copy
Group 2
Vector Smart Object copy
Vector Smart Object
Shape 8
Effects
Stroke
Group 1
Background copy
Background



30 Shift-drag a corner point inward to reduce the size, then position the Smart Object to the left of your skull Smart Object. Use the Move tool to Alt-drag (or Option-drag) the new Smart Object to the left, duplicating it. Press Control-T (or Command-T) to access Free Transform. When the bounding box appears, click and drag outside it to rotate the Object. When you're finished, press the Enter key and make another duplicate even farther to the left. Rotate and resize this duplicate via Free Transform as well. Target all three of these background Smart Objects in the Layers palette and press Control-G (or Command-G) to group them. Duplicate the group by dragging it onto the Create A New Layer button at the bottom of the Layers palette. Change the blending mode of the duplicate group to Color Burn and reduce the opacity to 39%.






STR | GRA | TRANSPARENCY

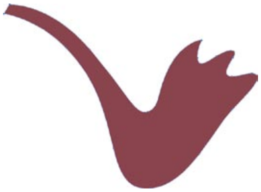
Normal   Opacity: 100 %

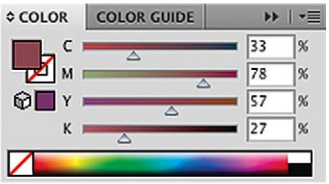
☐ Clip
☐ Invert Mask

☐ Isolate Blending   ⊟ Knockout Group
☐ Opacity & Mask Define Knockout Shape

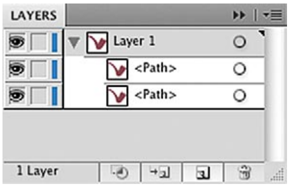
31 Expand either of these two new groups that contain your background Smart Objects and double-click a single Smart Object to open it in Illustrator. In Illustrator, choose File > Place from the menu. Navigate once again to the *mask.jpg* file and click Place. Resize the placed artwork so that it completely covers the vector art in the file. Position it so that a lot of the darker black areas in the bottom of the placed image cover the artwork. Select all and then choose the Make Opacity Mask option from the Transparency palette menu. Select the masked object and then disable the Clipping option in the Transparency palette. Save and close the file. When you return to Photoshop, your Smart Objects will automatically update to reflect the change.

PART FIVE: Creating the walking creature





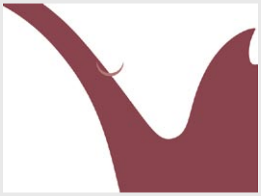
C 33 %
M 78 %
Y 57 %
K 27 %

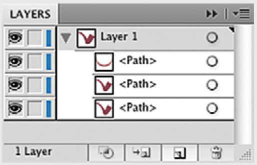


32 Return to Illustrator and create a new file. The size of the printable artboard does not matter since we're going to simply paste the finished result in Photoshop anyway. Choose View > Hide Artboards from the menu if you want to hide the edges of the artboard from view. This is just a preference of mine. If I'm not printing the art from Illustrator, generally I find the artboard edge more of a distraction than a benefit. Take a good look at the walking creature in the featured illustration at the beginning of this chapter; that's what we're going to create now. Use the Pen tool to create a closed object in the shape of one of the creature's legs. While the shape is selected, designate a Red fill color attribute in the Color palette that is similar to the one you used previously to outline the skull. Drag this sublayer onto the Create a New Layer button at the bottom of the Layers palette to duplicate it.

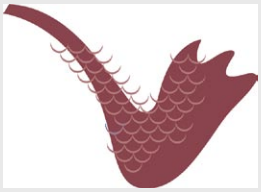
Adding texture to the leg

Basic shapes, pathfinder operations, replication, and clipping masks are the key ingredients in the texture applied to the creature's leg.

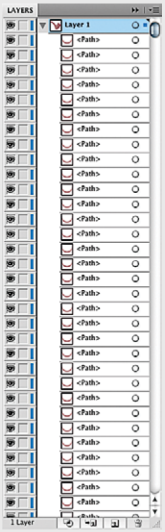


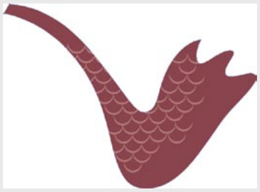


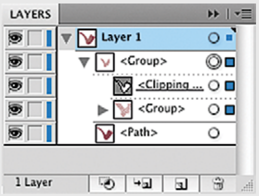
1 Draw a small circle that overlaps a portion of the leg. This time, specify a lighter pink fill color. Use the Selection tool to Alt-drag (or Option-drag) the circle upward so that a duplicate overlaps it slightly. Then select both circles and click the Minus Front button in the Pathfinder palette.



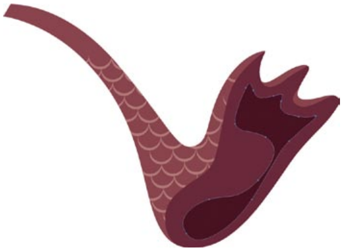
2 Use the Selection tool to Alt-drag (or Option-drag) the new shape to the right or left. Create another duplicate on either side if necessary so that the row extends beyond either side. Continue to use this duplication method until these shapes cover much of the leg, as shown here.

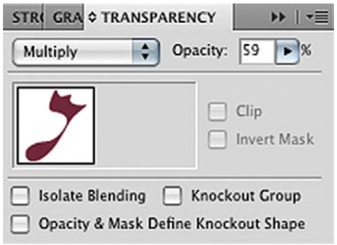






3 Select all these small shapes and group them. However, ensure that you do not include either leg shape in the group. Drag the duplicate leg shape above the group in the Layers palette, temporarily obscuring it. Select this duplicated shape and the new group that resides beneath it in the Layers palette and then choose Object > Clipping Mask > Make from the menu.





STR GRA ◇ TRANSPARENCY

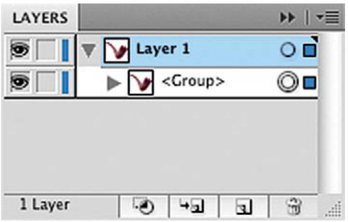
Multiply Opacity: 59 %

☐ Clip

☐ Invert Mask

☐ Isolate Blending ☐ Knockout Group

☐ Opacity & Mask Define Knockout Shape



LAYERS

Layer 1

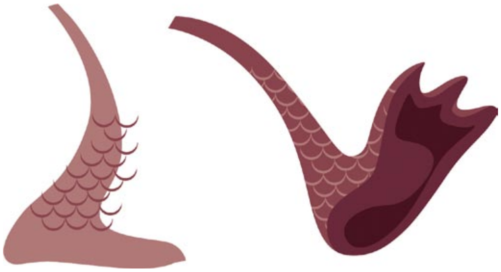
<Group>

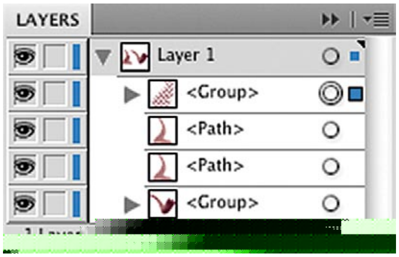
1 Layer

33 Now use the Pen tool to carefully create a shape that looks like the sole of the creature's foot. Take your time and use the Direct Selection tool to edit the curved line segments and points individually, if that is required to get the sole matching up nicely to the leg. Ensure that it is still selected as you create a darker red fill color attribute in the Color palette. Then create a smaller shape within the new sole shape. Use the same fill color, but in the Transparency palette change the blending mode of the shape to Multiply and reduce the opacity to 59%. Select all by pressing Control-A (or Command-A) and then group it all by pressing Control-G (or Command-G).

Again, if you don't want to draw …

If you are still are not interested in working with the Pen tool or creating this creature, it is supplied within the downloadable project files. The file is called *creature.ai*. You can open it, investigate the contents of the file, and get ready to copy and paste it into Photoshop in Part 6.





LAYERS

Layer 1

<Group>

<Path>

<Path>

<Group>

34 Use the Pen tool to create another closed shape to represent the other leg. Use the Eyedropper to click a light pink shape from the other leg to specify that light pink and the new shape's fill color attribute. Do not be too meticulous regarding the position of this leg on the artboard; we'll move it into position later after it is finished. When you have completed the shape, duplicate it in the Layers palette. Next, to represent the texture, create a group of shapes via the Pathfinder like ones you created previously for the other leg. However, this time specify a darker red fill color for these.

Moving within the Layers palette

Be careful when you are dragging things up or down within Illustrator's Layers palette. If you aren't careful, you can accidentally drop your object's sublayer into an existing group. When you see a dark line appear between two items in the Layers palette, it indicates that will be the new position of what you're dragging, once you release the mouse button. Stay on the lookout for this dark line. If you see bookended triangles on either side of a group, do not let go of the mouse button or you'll drop your sublayer into it.

Chapter 6

The Best of Both Worlds

Combining Cinema 4D with Photoshop

Historically, in the world of digital art and illustration, the general perception was that two-dimensional art and three-dimensional art fell into two separate camps. When I first dabbled in illustration, in the mid-1990s, there seemed to be people who worked in 2D and other people who worked in 3D. Nobody really crossed paths in terms of creating artwork. There was the odd exception, but for me, 3D models showed potential and seemed as valuable a resource as photography when working in Photoshop.

Photography allows us to capture what is around us. There is certainly room to create behind the lens of a camera. However, working with a 3D program allows you to create anything that you can imagine. This lack of limitation in photography is what prompted me to begin working with 3D. However, as a two-dimensional artist, I always had Photoshop integration in mind as I worked. By working in a nonlinear manner, bouncing back and forth between Cinema 4D and Photoshop, compelling results can be achieved. The unified compositions at the end of this process showcase the best of both worlds and result in a uniqueness that exceeds what is commonly perceived as the product of either program on its own.

Versions

Photoshop CS4
Cinema 4D Release 11

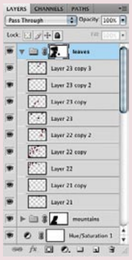
Requirements and Recommendations

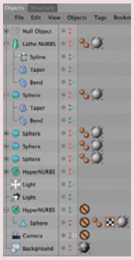
In addition to Photoshop, you'll need a copy of Cinema 4D. If you don't have a copy of Cinema 4D, a trial version can be downloaded from www.maxon.net.

Model photo: Vincent Lions; Model: Josie Lee; Hair and makeup: Angela Veel

What you'll learn in this chapter

Creative Techniques and Working Methods


LAYERS
CHANNELS
PATHS
Pass Through
Opacity: 100%
Lock:
Fill:
leaves
Layer 23 copy 3
Layer 23 copy 2
Layer 23 copy
Layer 23
Layer 22 copy 2
Layer 22 copy
Layer 22
Layer 21 copy
Layer 21
mountains
Hue/Saturation 1

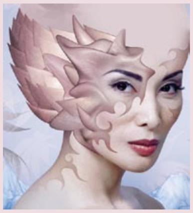

Objects
Structure
File
Edit
View
Objects
Tags
Null Object
Lathe NURBS
Spline
Taper
Bend
Sphere
Taper
Bend
Sphere
Sphere
Sphere
HyperNURBS
Light
Light
HyperNURBS
Sphere
Camera
Background

A familiar modular approach

When you begin working with Cinema 4D, it will likely feel somewhat foreign if you are new to it or new to 3D in general. However, as you begin to create in Cinema 4D, you will start to notice that it is clearly designed to facilitate a modular, nondestructive, and nonlinear workflow. There is a similarity in logic in working in either Photoshop or Cinema 4D.

In Photoshop, the Layers palette allows us to construct a file in a way that keeps everything separate. In the Photoshop Layers palette, we have groups that act as containers, layer effects, two different types of masks, blending modes—the list goes on and on. Separate components exist on separate layers and can be edited without affecting original content or other components within the image file. In Cinema 4D, the Object Manager performs a similar task. You can arrange and assemble all the objects in a scene. You can rearrange the hierarchy, assign tags for texture and other attributes, place objects inside deformers or generators in a parent/child relationship—the list goes on and on here as well. Although the components and functions are vastly different from those found in the Photoshop Layers palette, the sensibility of an infinitely flexible workflow remains the same.

An imagery-driven process

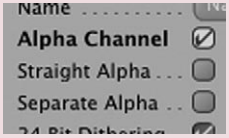


You don't need Photoshop CS4 Extended to work along here. We'll be working with imagery that is generated from rendered files when bringing 3D art into Photoshop as 2D files. Because there is no specific need to work with these assets in 3D space or to alter light and texture once they are placed in Photoshop, there is no need to restrict this project to users equipped with the Extended version of Photoshop. This chapter is for everyone who wants to use an image-based approach to bridging the gap between 2D and 3D in Photoshop.

Tools, Features, and Functions

HyperNurbs

HyperNurbs are your best bet when it comes to creating quick and easy organic forms in Cinema 4D. HyperNurbs allow you to interactively subdivide and round your objects with ease.

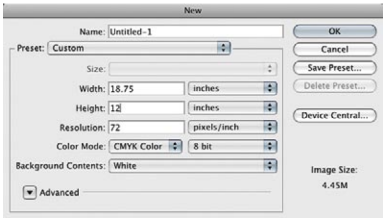


Name ....
Alpha Channel ☑
Straight Alpha ... ☐
Separate Alpha .. ☐

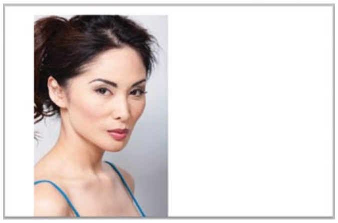
Render with channels

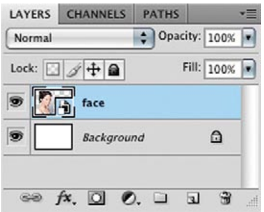
Simply enabling the alpha channel function in Cinema 4D's Render options will allow you to quickly generate a selection around the perimeter of your objects when you open your renderings in Photoshop. This might seem like a small thing, but it is a monumental time saver.

PART ONE: Building a base in Photoshop


New
OK
Cancel
Save Preset...
Delete Preset...
Device Central...
Advanced

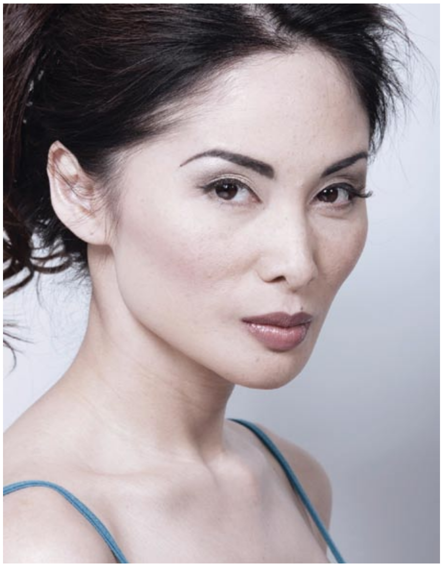
Name: Untitled-1
Preset: Custom
Size:
Width: 18.75 inches
Height: 12 inches
Resolution: 72 pixels/inch
Color Mode: CMYK Color 8 bit
Background Contents: White
Image Size: 4.45M

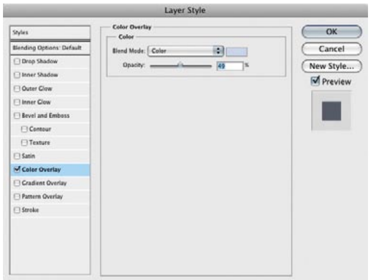



LAYERS
CHANNELS
PATHS
Lock:

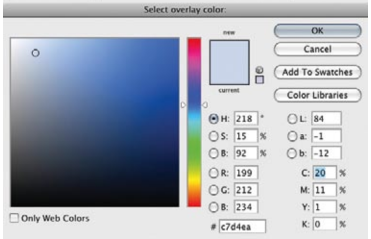
Normal
Opacity: 100%
Fill: 100%
face
Background

1 In Photoshop, press Control-N (or Command-N) to create a new file. Set the canvas dimensions to 18.75 inches wide by 12 inches high, with a resolution of 72 ppi. Use a CMYK color mode and leave the canvas color set to white. This file will act as the working file for the rest of the chapter. Keep it open at all times because we'll be placing photography and rendered 3D images into it to create the final illustration. From the menu, choose File > Place and navigate to the *face.jpg* file, included in the downloadable project files for this chapter. Click the Place button and then Shift-drag a corner point of the bounding box inward to reduce the size of the placed Smart Object and position it as shown here. When you're happy with the size and placement, press the Enter key.




Layer Style
Styles
Blending Options: Default
Drop Shadow
Inner Shadow
Outer Glow
Inner Glow
Bevel and Emboss
Contour
Texture
Satin
Color Overlay
Gradient Overlay
Pattern Overlay
Stroke
Color Overlay
Color
OK
Cancel
New Style...
Preview

☑ Color Overlay
Blend Mode: Color
Opacity: 49 %
☑ Preview

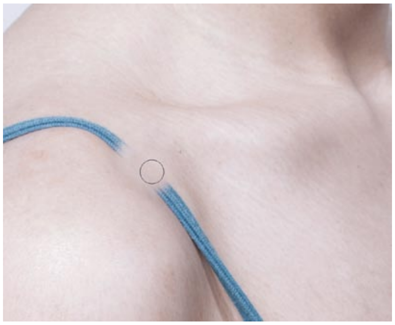

Select overlay color:
new
current
OK
Cancel
Add To Swatches
Color Libraries

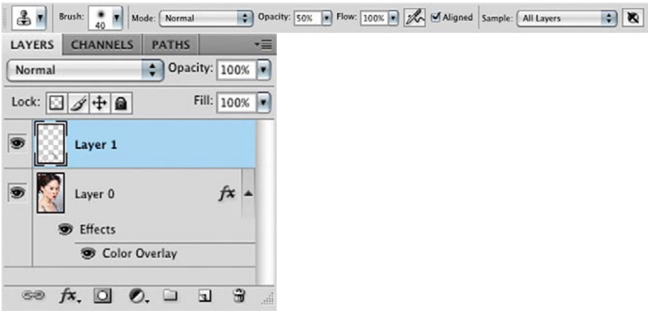
● H: 218 °
○ S: 15 %
○ B: 92 %
○ R: 199
○ G: 212
○ B: 234
○ L: 84
○ a: -1
○ b: -12
C: 20 %
M: 11 %
Y: 1 %
K: 0 %
# c7d4ea
☐ Only Web Colors

2 Double-click the Smart Object in the Layers palette to open it in a new window. Hold down the Alt (or Option) key and double-click the Background layer in the Smart Object file, to convert it to a standard layer. With the converted layer targeted, choose the Color Overlay option from the Add A Layer Style menu at the bottom of the Layers palette. In the Color Overlay Options, change the Blend mode to Color and reduce the opacity to 49%. Click the color swatch and choose a gray/blue/mauve color from the picker similar to the one shown here. Click OK in the picker, and then OK again in the Layer Styles box.

Project files

All the files needed to follow along with this chapter and create the featured image are available for download on the accompanying Website, in the project files section. Visit www.beyondphotoshopthebook.com.





Brush: 40 | Mode: Normal | Opacity: 50% | Flow: 100% | ☑ Aligned | Sample: All Layers

LAYERS | CHANNELS | PATHS

Normal | Opacity: 100%

Lock: | Fill: 100%

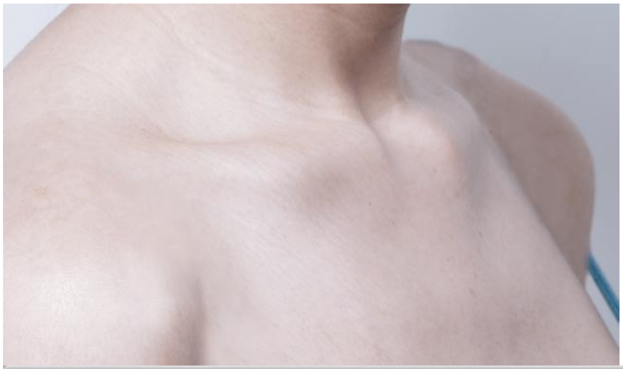
Layer 1

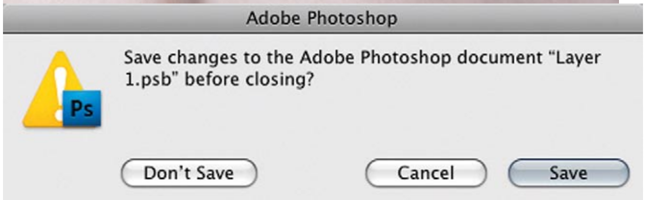
Layer 0

Effects

Color Overlay

3 Click the Create A New Layer button at the bottom of the Layers palette. Ensure that the new layer is targeted, then select the Clone Stamp tool from the Toolbar. Ensure that you choose the All Layers option from the Sample menu in the Tool Options bar. Select a soft, round brush tip preset from the preset picker and reduce the opacity to 50% to start. Now let's remove the straps from her chest. Zoom in closely on a strap region. Adjust the size of your brush as required so that it is large enough to only cover the strap. Then Alt-click (or Option-click) a region beside the strap to sample it. Then paint over the strap near this region to cover it on the new layer. Use this method repeatedly to gently build up the effect, covering the strap in that region.





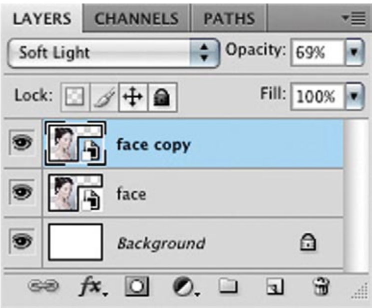
Adobe Photoshop

Save changes to the Adobe Photoshop document “Layer 1.psb” before closing?

4 Use this method over and over again until both straps are covered in their entirety. Be certain to sample from different regions often and vary the size and opacity of the tool as required. Take your time here; don't be afraid to redo areas that aren't convincing the first time around. Do not worry about the part of her strap that overlaps the background; we'll trim the background later. Right now, just spend your time on removing the straps overlapping her skin. When you're finished, close the file. When prompted, save the changes.

Tom Bagshaw

My inspiration for this style of imagery is the work of renowned artist Tom Bagshaw. His unique work resides somewhere between realistic painting and graphic design. I love the way he combines two-dimensional and three-dimensional elements in his compositions. Somehow, regardless of the subject, there is always a sense of openness or space in his imagery that I find compelling. View Tom's portfolio at www.mostlywanted.com.

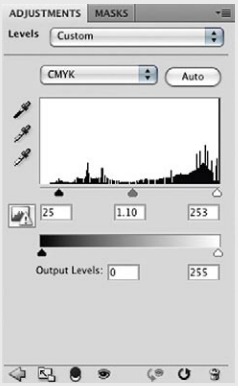


LAYERS CHANNELS PATHS
Soft Light
Opacity: 69%
Lock:
Fill: 100%
face copy
face
Background

5 In your working file, duplicate the Smart Object by dragging it onto the Create A New Layer button at the bottom of the Layers palette. Change the blending mode of the duplicate layer to Soft Light and reduce its opacity to 69% in the Layers palette.

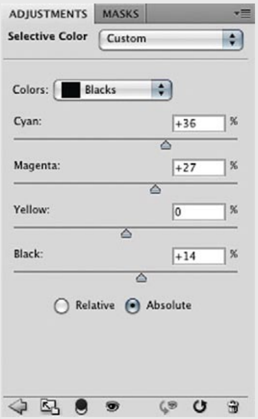
Stack up adjustments

Build up a few adjustment layers to enhance the contrast and shadows of the stacked Smart Objects below.



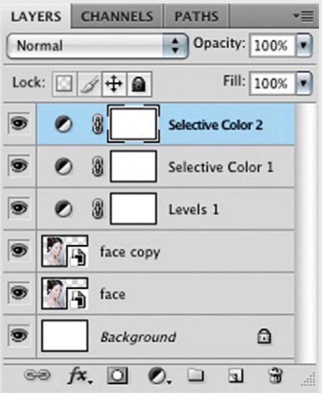
ADJUSTMENTS MASKS
Levels: Custom
CMYK
Auto
25
1.10
253
Output Levels: 0
255

1 Choose the Levels option from the Create New Fill or Adjustment Layer menu at the bottom of the Layers palette to create a new levels adjustment layer. Drag the input slider at the left inward to darken the shadows. Then tweak the midtones as well as the highlights slider at the right to increase the contrast.



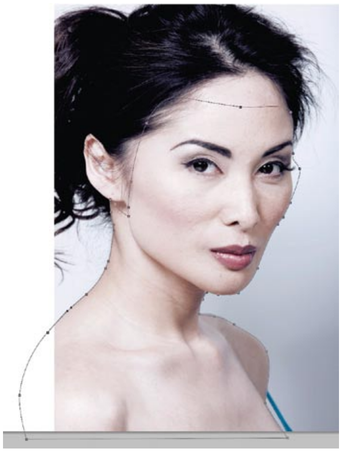
ADJUSTMENTS MASKS
Selective Color: Custom
Colors: Blacks
Cyan: +36 %
Magenta: +27 %
Yellow: 0 %
Black: +14 %
○ Relative ● Absolute

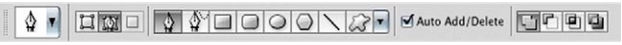
2 Next create a selective color layer by choosing selective color from the same menu. In the Adjustments palette, increase the amount of cyan, magenta, and black in the Blacks to deepen the color as shown here.



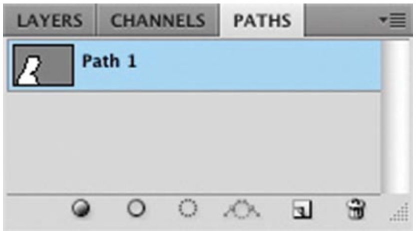
LAYERS CHANNELS PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background

3 Create another Selective Color adjustment layer; this time, simply increase the black content within the Blacks by 15 to intensify the effect a little more. At this point your file should consist of a couple of stacked Smart Objects with a few Adjustment layers stacked above them.



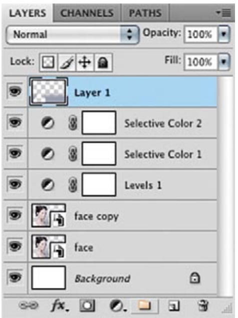


☑ Auto Add/Delete



Path 1

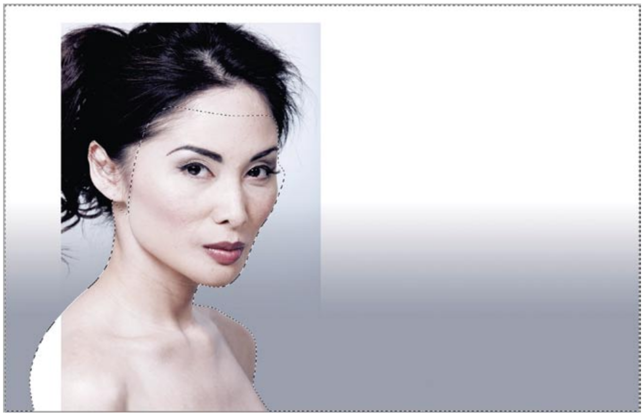
6 Create a new layer and target it in the Layers palette. Select the Pen tool and ensure that it is set to create Paths in the Tool Options bar. Also ensure that the Add to Path Area operation is enabled before you begin to draw. When you've set everything up properly, carefully draw a path that surrounds her neck and shoulders. Stray away from her eye in the area where her eyelashes overlap the background. Then return to the edge of her head, where her eyebrow and forehead meet the background at the right of the image. Be certain to draw the path well below her hairline; also ensure that it does not include her ear or any hair at the right of the image. It should look something like what is shown here.

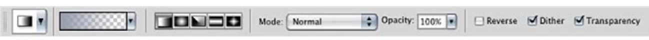


Normal Opacity: 100%

Lock: Fill: 100%

Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background



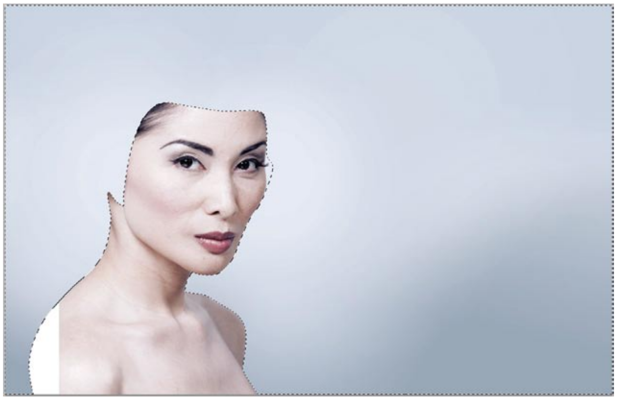


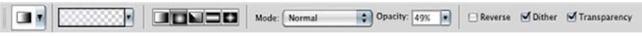
Mode: Normal Opacity: 100% ☐ Reverse ☑ Dither ☑ Transparency

Name the path

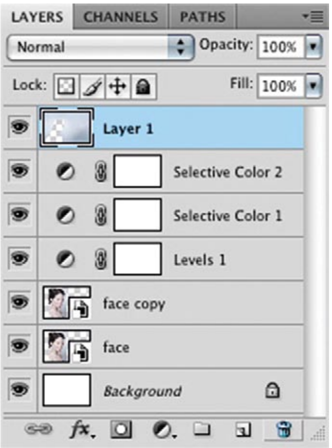
Ensure that you double-click your path thumbnail in the Paths palette to name it. It doesn't matter what you name it; you can simply leave it labeled *Path 1*. If you leave the name set to *work path*, it will be overwritten next time you create a path. Be certain to name all paths you create so that you preserve them for use later on.

7 Load the path as a selection by Control-clicking (or Command-clicking) the thumbnail in the Paths palette. Invert the selection by pressing Control-Shift-I (or Command-Shift-I) on the keyboard. Return to your new layer in the Layers palette and select the Gradient tool. Choose the Foreground to Transparent gradient preset from the preset picker in the Tool Options bar and select the Linear method. Leave the opacity set to 100% and then Alt-click (or Option-click) the dark blue/gray region near the bottom of the background in the photograph. Click and drag upward within the new selection on the new layer.





Mode: Normal Opacity: 49% ☐ Reverse ☑ Dither ☑ Transparency



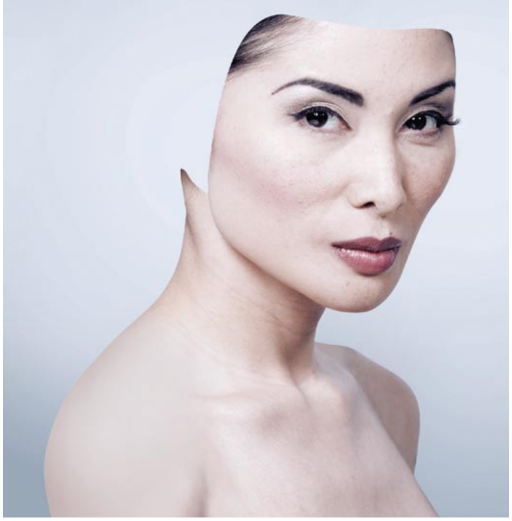
LAYERS CHANNELS PATHS

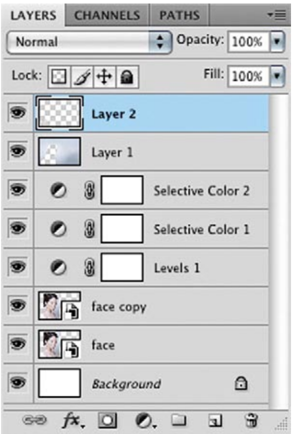
Normal Opacity: 100%

Lock: Fill: 100%

- Layer 1
- Selective Color 2
- Selective Color 1
- Levels 1
- face copy
- face
- Background

8 Now, Alt-click (or Option-click) in the background of the photograph at the top of the image to sample that color as the current foreground color. Then click and drag downward a little to create a similar gradient effect at the top. After that, switch to the Radial method in the Tool Options bar. Sample colors from within the gradients you just created as well as from the background of the photograph, and repeatedly create numerous new gradients in the rest of the selection on this layer. Alter the opacity and size of the gradients option; also be certain to create a gradient beside her eye that resembles the color that lies outside the selection in that region, to make it believable. Continue like this until the entire selection is filled with smooth gradations of color.





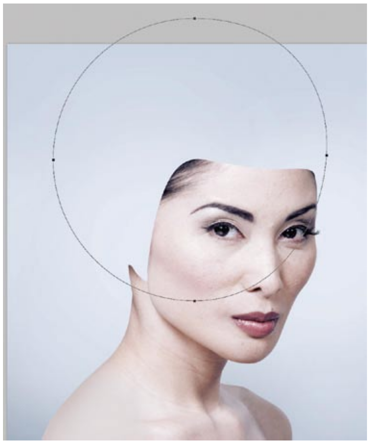
LAYERS CHANNELS PATHS

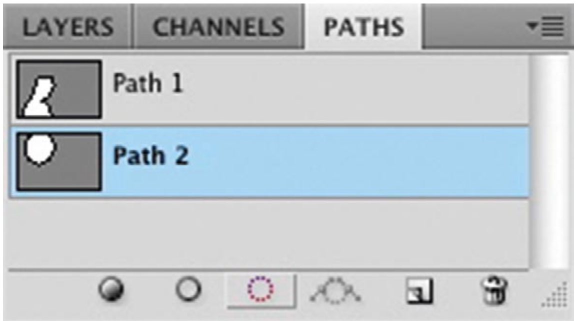
Normal Opacity: 100%

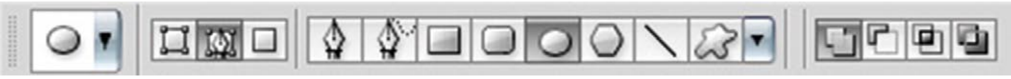
Lock: Fill: 100%

- Layer 2
- Layer 1
- Selective Color 2
- Selective Color 1
- Levels 1
- face copy
- face
- Background

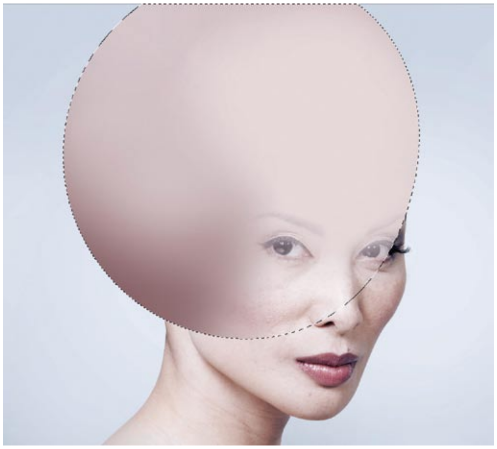
9 Invert the selection and create a new layer. With the inverted selection active, Alt-click (or Option-click) a dark area of skin near her shoulder. Create a radial, foreground to transparent gradient in this area using an opacity setting of 100%. Then sample lighter regions from within the area and add them as necessary, so the gradients you've created look as though they belong. Don't worry about the results looking as 3D as the photograph; we want to also include some juxtaposition between 3D volumetric art and flat 2D art within the image overall. When you're happy with what you've done, press Control-D (or Command-D) to deactivate the selection.

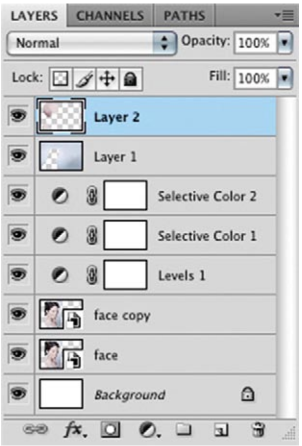






10 Select the Ellipse shape tool and ensure that it is set to create Paths and that the Add To Path Area operation is enabled in the Tool Options bar. Shift-drag to create a perfect circle on the canvas that represents a large afro-like mass at the top of her head. You can position the path as necessary by clicking and dragging it with the Path Selection tool. Also, if you need to resize the path, you can press Control-T (or Command-T) while the path is selected. When the transform bounding box appears, you can Shift-drag a corner point inward or outward to proportionately alter the size. When you're happy with the transformation, press the Enter key to apply it.

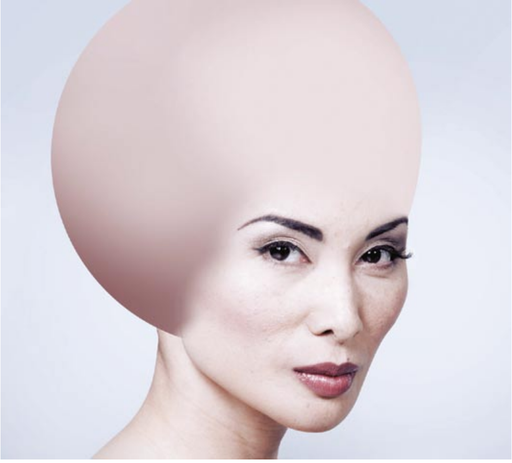


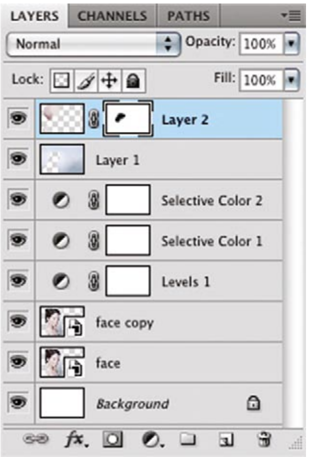


Normal Opacity: 100%

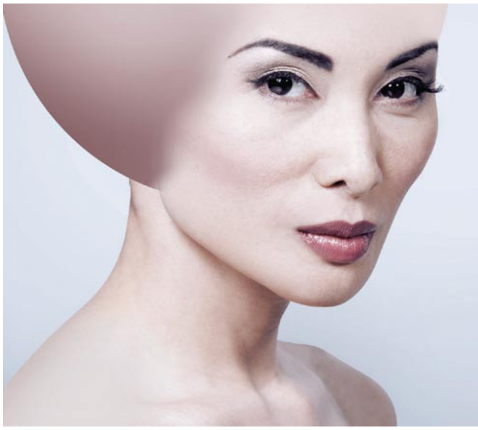
Lock: Fill: 100%

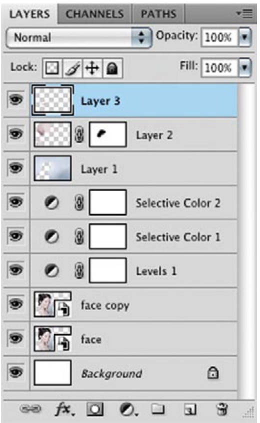
11 Control-click (or Command-click) the ellipse path in the Paths palette to load it as a selection. Return to the current layer in the Layers palette. Select the Gradient tool again and use it within the selection to fill the shape with gradients of colors sampled from neighboring areas of skin on underlying layers. You will use the radial gradient method exclusively, and don't deviate from the foreground to transparent preset or you'll fill the entire selection. Generally, a good working method is to start with darker gradients around the edge, where appropriate, then create lighter, more centralized gradients on top of these. Try to avoid covering the eyes or brows with gradients. However, if this is necessary, that is fine. We will mask the layer next.

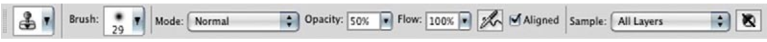



LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background

12 Press Control-D (or Command-D) to deactivate the selection, and click the Add Layer Mask button at the bottom of the Layers palette to mask the layer. Target the layer's mask in the Layers palette. By default, when you create a mask and edit it, the foreground color becomes white and the background color becomes black. Press the x key to invert them so that black becomes the foreground color. Use the Gradient tool to create a few small black-to-transparent gradients within the mask, overlapping areas on the canvas where the flesh-colored gradients obscure her eyes and brows.

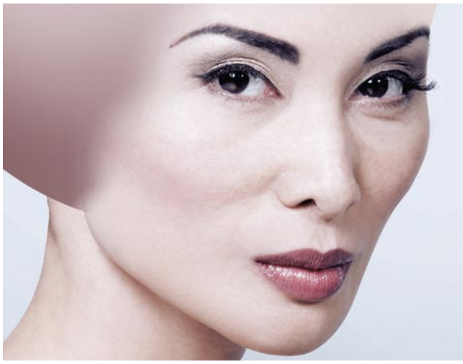



LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background

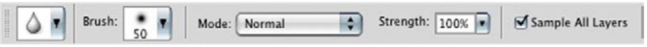


Brush: 29 Mode: Normal Opacity: 50% Flow: 100% ☑ Aligned Sample: All Layers

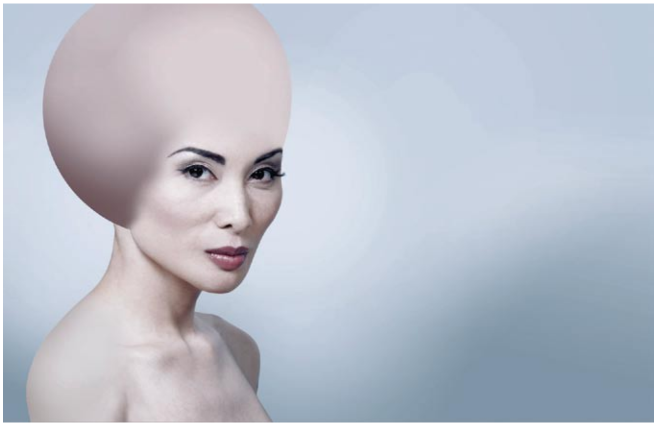
13 Create a new layer and ensure that it is targeted in the Layers palette. Select the Clone Stamp from the Toolbar and ensure that the All Layers method is selected from the Sample menu in the Tool Options bar. Now what we want to remedy at this point are things such as blemishes on her face and bits of stray hair. Use the same method you used previously to clone out her straps within the Smart Object. Find an area and Alt-click (or Option-click) a bit of clean flesh right beside it. Then paint over the offending region. Vary brush sizes and opacity settings as necessary. Sample often, and use a soft-edged brush preset for best results. Again, don't rush this part of the process or you'll regret it later. Do not remove all the details, such as her freckles; these will help the image feel realistic and human after we're done. However, spend a fair bit of time cleaning up stray hairs around the eyebrows and removing any wrinkles from her neck.



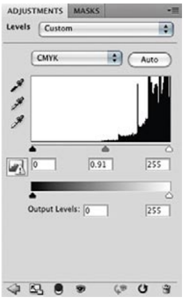
14 Now select the Blur tool from the Toolbar. Specify a soft, round brush tip preset and ensure that the strength is set to 100% and that the Sample All Layers option is enabled in the Tool Options bar. Use the Blur tool to paint over regions of her face that could use a little smoothing yet do not need to be replaced. Find regions that are slightly wrinkled or porous. Increase and decrease the strength as necessary and alter the diameter of the brush tip as you go.



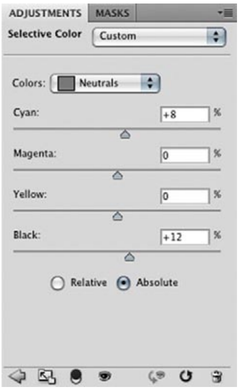
Brush: 50 Mode: Normal Strength: 100% ☑ Sample All Layers



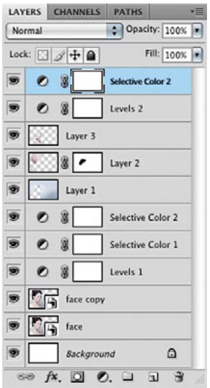
15 Create a new Levels adjustment layer by choosing Levels from the Create New Fill or Adjustment Layer menu at the bottom of the Layers palette. In the Adjustments palette, simply drag the middle slider to the right a little to darken the midtones in the image overall. Next, create a new Selective Color layer by choosing the Selective Color option from the same menu at the bottom of the Layers palette. In the Adjustments palette, choose Neutrals from the Colors menu and then increase the amount of cyan and black slightly within the image. Save your file at this point.


ADJUSTMENTS
MASKS
Auto

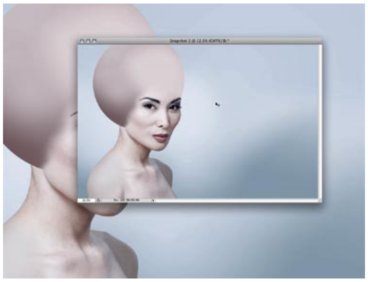
Levels: Custom
CMYK
0 0.91 255
Output Levels: 0 255

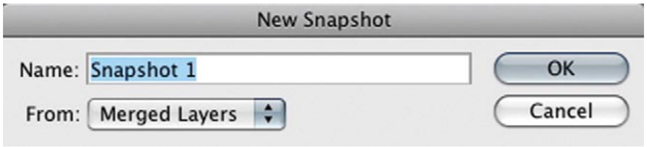

ADJUSTMENTS
MASKS

Selective Color: Custom
Colors: Neutrals
Cyan: +8 %
Magenta: 0 %
Yellow: 0 %
Black: +12 %
○ Relative ● Absolute


LAYERS
CHANNELS
PATHS
Lock:
Selective Color 2
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background

Normal Opacity: 100%
Fill: 100%

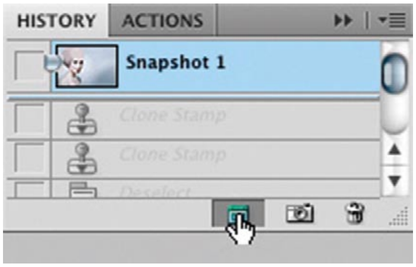




New Snapshot

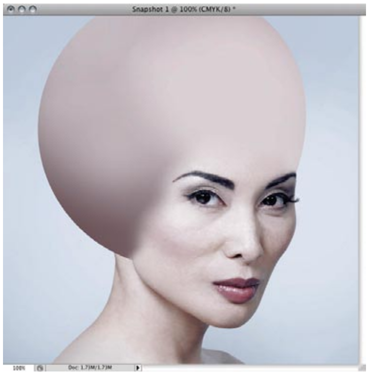
Name: Snapshot 1

From: Merged Layers

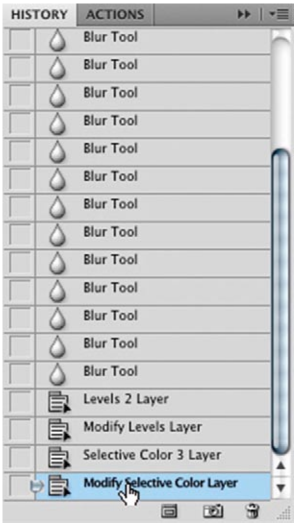


HISTORY
ACTIONS
Snapshot 1
Clone Stamp
Clone Stamp
Deselect

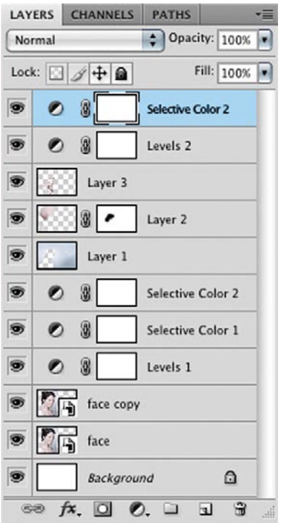
16 In the History palette menu, choose the New Snapshot option. When the new Snapshot dialog box appears, choose the Merged Layers option. Don't worry about the name, it can remain set to *Snapshot 1* because we're going to name the file later when we save it. Click OK. You will see your snapshot appear above the list of history states in the History palette. Depending on how you have the History Options set, there could be another snapshot of your image in its original state. In any case, click the new snapshot at the top of the History palette and then click Create New Document From Current State at the bottom left of the History palette. This will open a document from your snapshot in a new window. The original file remains open in the window behind it.



Snapshot 1 @ 100% (CMYK/8) *



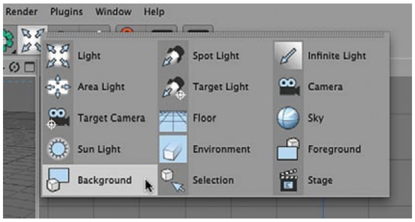
HISTORY
ACTIONS
Blur Tool
Blur Tool
Blur Tool
Blur Tool
Blur Tool
Blur Tool
Blur Tool
Blur Tool
Blur Tool
Blur Tool
Blur Tool
Blur Tool
Blur Tool
Levels 2 Layer
Modify Levels Layer
Selective Color 3 Layer
Modify Selective Color Layer

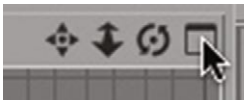


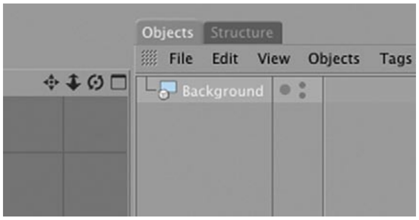
LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Selective Color 2
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background

17 In the new snapshot file, select the Crop tool from the Toolbar. Click and drag to draw a rectangular cropping area that surrounds the head but crops out the lower portion of her chest and all the negative space at the right of the image. Press the Enter key to crop the image. Select Image > Mode > RGB from the menu to convert the image to RGB from CMYK. This will help the accuracy of the preview when we get into Cinema 4D. Choose File > Save As from the menu and save the file in .psd format as Background.psd. Close the file and return to your working file in Photoshop. All of the layer will be merged, but don't fret. All you need to do is scroll to the bottom of the History palette and click the very last state at the bottom. This will revert the file to the state it was in right before you merged it. After you click this state, the layers will all become visible in the Layers palette once again.

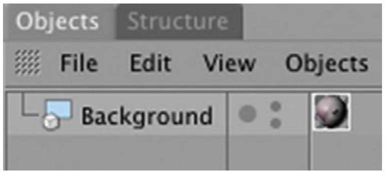
PART TWO: Getting set up in Cinema 4D

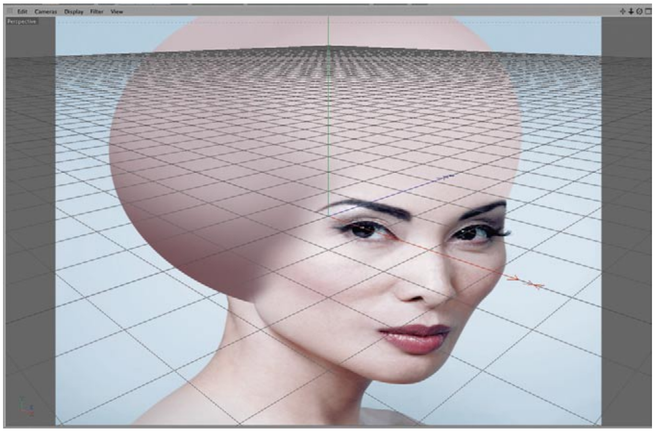

Render
Plugins
Window
Help
Light
Spot Light
Infinite Light
Area Light
Target Light
Camera
Target Camera
Floor
Sky
Sun Light
Environment
Foreground
Background
Selection
Stage




Objects
Structure
File
Edit
View
Objects
Tags
Background

18 Launch Cinema4D. Initially you will only see a single, perspective view in the viewport. To remedy this, click the icon in the upper-right corner of the viewport. This will change the workspace to a four-up view, not only allowing you to see the perspective view but also showing you top, front, and right views at the same time. The first thing we're going to do is bring our *Background.psd* file into the perspective window to use it as a template while creating 3D objects in the scene. Click and hold the Scene Objects button in the top Toolbar to temporarily open the Scene Objects palette. Click the Background Object to create new Background Object within the scene. You will see the Background Object appear in the Object Manager at the right of the interface.

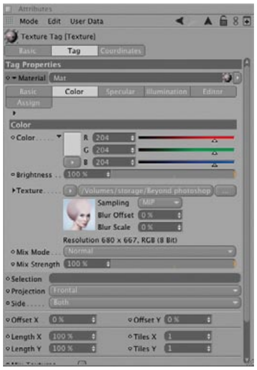

Objects
Structure
File
Edit
View
Objects
Background



19 Next, choose File > New Material from the Material Manager menu at the bottom left of the interface to create a new material. Double-click the new material to open the Material Editor. Click Color from the list of options at the left of the Material Editor. In the resulting color options, click the horizontal bar to the right of the Texture option and navigate to the Background.psd file you created. Close the Material Editor window and then drag the material from the Material Manager at the bottom left of the interface directly onto the Background Object in the Object Manager to add it as a texture tag to the object. You will immediately see it appear in the background of the perspective window, but it will be distorted.

Not Using Cinema 4D?

If you are following along with the Photoshop portion of this chapter only, you'll find the finished Cinema 4D renderings included in the downloadable project files for this chapter. Simply open them as they are referred to by name in the text and you can follow along with the 3D portions of this chapter.



Attributes

Mode Edit User Data

Texture Tag [Texture]

Basic | Tag | Coordinates

Tag Properties

Material: Mat

Basic | Color | Specular | Illumination | Editor | Assign

Color

Color: R 204, G 204, B 204

Brightness: 100 %

Texture: /Volumes/storage/Beyond photoshop

Sampling: MIP

Blur Offset: 0 %

Blur Scale: 0 %

Resolution 680 x 667, RGB (8 Bit)

Mix Mode: Normal

Mix Strength: 100 %

Selection

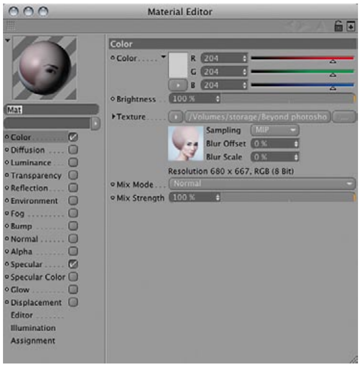
Projection: Frontal

Side: Both

Offset X: 0 % Offset Y: 0 %

Length X: 100 % Tiles X: 1

Length Y: 100 % Tiles Y: 1



Material Editor

Mat

Color ☑

Diffusion ☐

Luminance ☐

Transparency ☐

Reflection ☐

Environment ☐

Fog ☐

Bump ☐

Normal ☐

Alpha ☐

Specular ☑

Specular Color ☐

Glow ☐

Displacement ☐

Editor

Illumination

Assignment

Color

Color: R 204, G 204, B 204

Brightness: 100 %

Texture: /Volumes/storage/Beyond photosho

Sampling: MIP

Blur Offset: 0 %

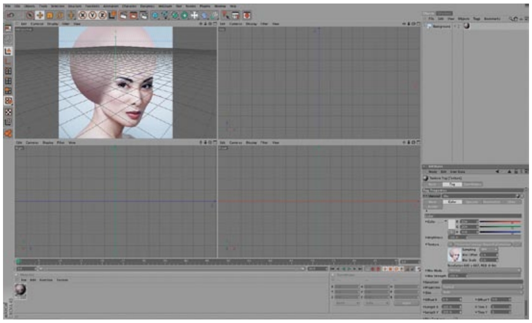
Blur Scale: 0 %

Resolution 680 x 667, RGB (8 Bit)

Mix Mode: Normal

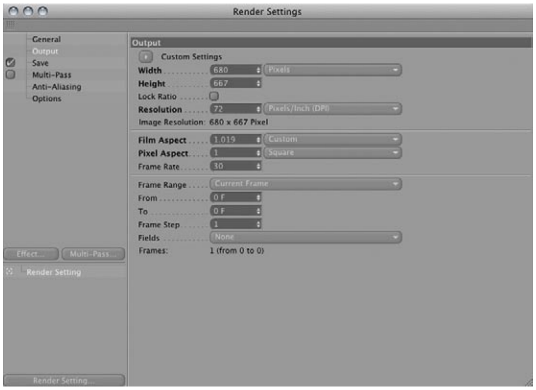
Mix Strength: 100 %

20 To remedy the image distortion, we need to alter the render settings. Before you go to the render settings, however, you should note the exact pixel dimensions of the image in your material. To see the dimensions, you can either double-click the material in the Material Manager to open the Material Editor or, if you double-click the Texture tag in the Object Manager, you'll see the information displayed in the Attributes Manager. The Texture section will display the pixel dimensions directly beneath an image thumbnail. If you're looking in the Material Editor window, ensure that you select the Color option from the left, if it isn't already targeted, and you'll see a very similar display to that which is shown in the Attributes Manager. Make a note of the actual pixel resolution. Yours will likely be a little different than mine.



Cinema 4D files

If you want to follow along with the project in this chapter, yet the prospect of working with Cinema 4D is daunting or unappealing to you, don't fret; the completed Cinema 4D files are included in the downloadable project files for this chapter. The Cinema 4D files are saved as projects, which include all textures used. The file that contains all the objects we created for the model's face is in a folder named *model 1*. The other file that contains the background elements is in a folder named *model 2*. You can open these files in Cinema 4D and peruse all the elements. You can also render directly from these files if you like.



Render Settings

General

Output

☑ Save

☐ Multi-Pass

Anti-Aliasing

Options

Effect... | Multi-Pass...

Render Setting

Output

Custom Settings

Width: 680 Pixels

Height: 667

Lock Ratio: ☐

Resolution: 72 Pixels/Inch (DPI)

Image Resolution: 680 x 667 Pixel

Film Aspect: 1.019 Custom

Pixel Aspect: 1 Square

Frame Rate: 30

Frame Range: Current Frame

From: 0 F

To: 0 F

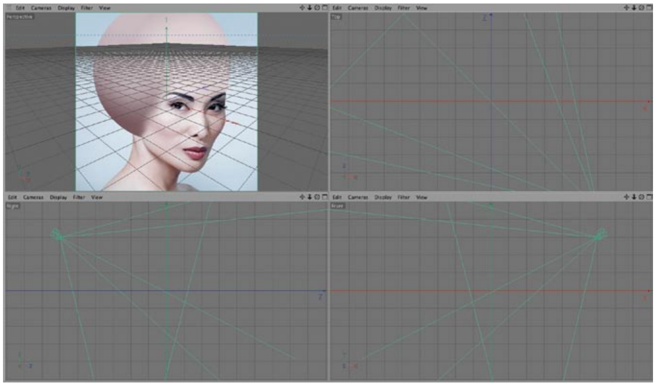
Frame Step: 1

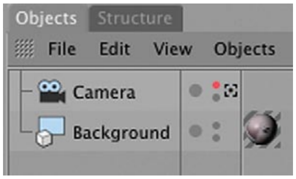
Fields: None

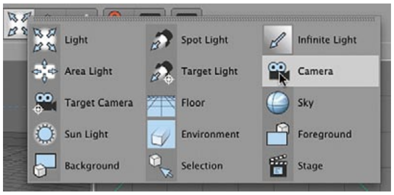
Frames: 1 (from 0 to 0)

Render Setting...

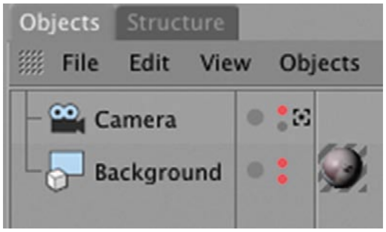
21 Choose Render > Render Settings from the main menu at the top of the interface. In the Render Settings window, click the Output option at the left. In the Height and Width fields, enter the exact pixel dimensions of the image texture in your material. You will immediately see the image displayed in the perspective viewport change to its proper aspect ratio. Close the Render Settings window for the time being. Now that the Background Object has been added to the scene, we can enable or disable the visibility as necessary as we work. Generally, it will only need to be visible from time to time to ensure that the angles of our objects will match up with the perspective of the image.

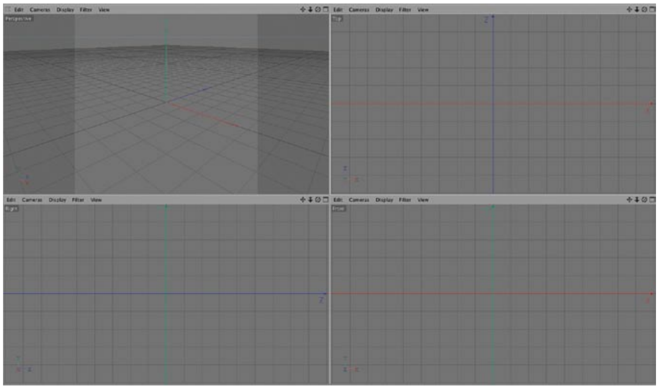



Objects
Structure
File
Edit
View
Objects
Camera
Background


Light
Spot Light
Infinite Light
Area Light
Target Light
Camera
Target Camera
Floor
Sky
Sun Light
Environment
Foreground
Background
Selection
Stage

22 Click and hold the Scene Objects button in the top Toolbar to open the Scene Objects palette. Select the Camera object to add a camera to the scene, and then release the mouse button. You'll see a camera immediately appear in the scene. We're not going to use the camera just yet, so for the time being we'll simply hide it. In the Object Manager, double-click the top visibility dot to the right of your camera object. The dot will turn red, and although the object continues to exist in the Object Manager, it will be hidden from view.


Objects
Structure
File
Edit
View
Objects
Camera
Background

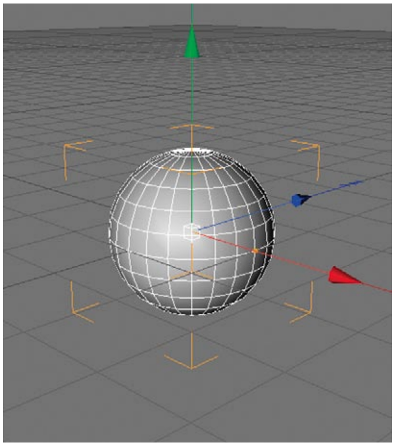


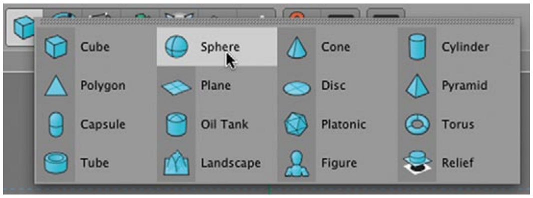
23 Now that we're editing the visibility of objects within the scene, we should direct our attention to the Background Object as well. Begin by double-clicking the bottom visibility button to the right of the Background Object. It will turn red, but it will remain visible in the scene. This actually hides the visibility of the object when the scene is rendered. Although we have quite a bit of modeling ahead of us, now is as good a time as any to hide it in future renderings. Remember, this Background Object is going to be used only as a guide; we don't want it visible in the finished art. Also, it is less visually distracting to simply hide the Background Object from view when it is not being used. To do this, simply double-click the top Visibility button to the right of the Background Object in the Object Manager. Now that you've hidden both objects within the scene, it will appear empty, but it is not.

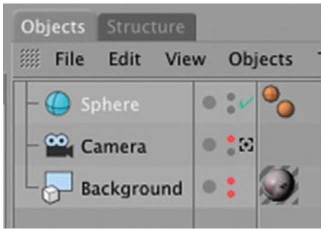
Toggling views

Using the function keys from F1 through to F5 will allow you quickly toggle through the main views in the viewport. These are the four views that are present when you are viewing four at a time. F1 shows the perspective view, F2 shows the top view, F3 shows the right view, F5 shows the front view, and F5 takes you back to a four-up view.

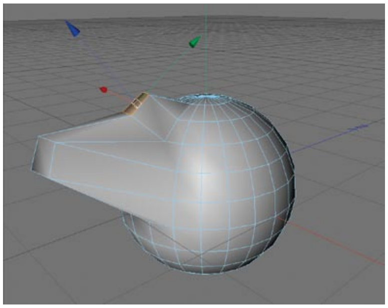
PART THREE: Working with 3D shapes

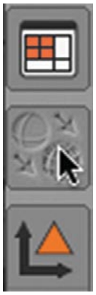


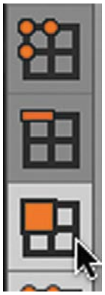

Cube
Sphere
Cone
Cylinder
Polygon
Plane
Disc
Pyramid
Capsule
Oil Tank
Platonic
Torus
Tube
Landscape
Figure
Relief

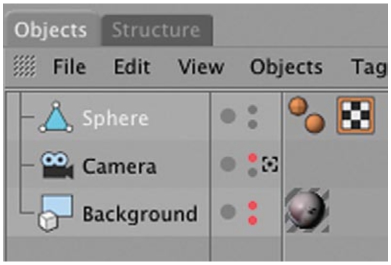

Objects
Structure
File
Edit
View
Objects
Sphere
Camera
Background

24 Click and hold the Primitive Object button in the top Toolbar to open the Primitive Object palette. Select the Sphere Object and immediately you'll see a Sphere Object appear in the viewport as well as in the Object Managers. In the perspective panel of the viewport, click the icon in the upper right to view the perspective panel only. We'll edit the Sphere in a single pane only for the time being so that we can view it much larger as we work. For what we're going to do, we do not need the other three panes visible just yet. We can always switch to a four-up view again at any point by clicking the same icon in the upper right.

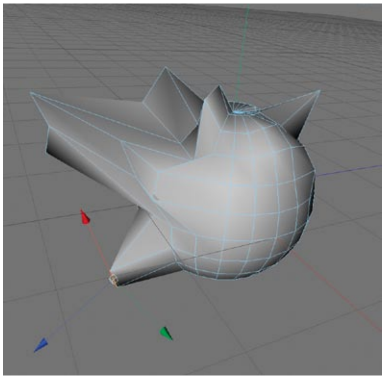


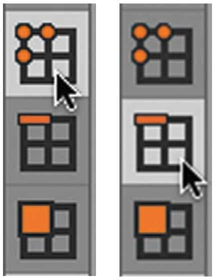





Objects
Structure
File
Edit
View
Objects
Tag
Sphere
Camera
Background

25 Now, although we are starting with a sphere, we're really going to alter the geometry of this shape so that it becomes something else altogether. This shape will surround the left eye in the Photoshop image. Bear that in mind while you're working, but don't dwell on matching it up perfectly just yet. First we'll create a compelling object, and then we'll align it nicely afterward. Click the Make Object Editable button in the Toolbar at the left. Then choose the Polygon tool from the Toolbar at the left. Click a polygon near the left side of the sphere to select it and then use the axis handles to move it away from the rest of the object, stretching it out. Try this again with another polygon to a lesser degree.

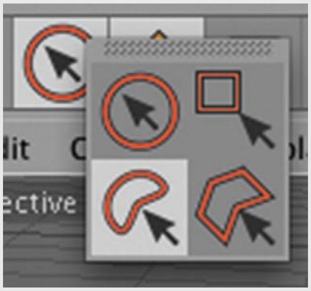


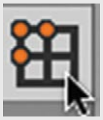


26 After moving some individual polygons, click the Point Tool button in the Toolbar at the left. This will allow you to select and edit individual points on the shape. Now, as you did previously with individual polygons, select individual points and then use the axis handles to move them around, modifying the shape even further. After experimenting with moving individual points, click the Edge Tool button in the Toolbar at the left. This will allow you to select individual edges and then move them around in the same manner.

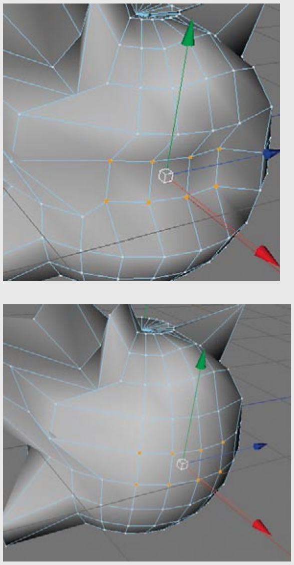
A bigger impact

By combining a Selection tool with the Polygon tool, we can alter the object drastically by moving a series of points at once.

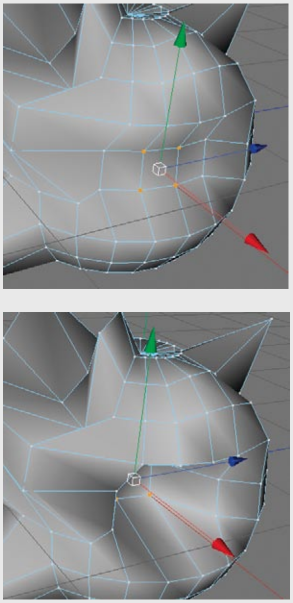




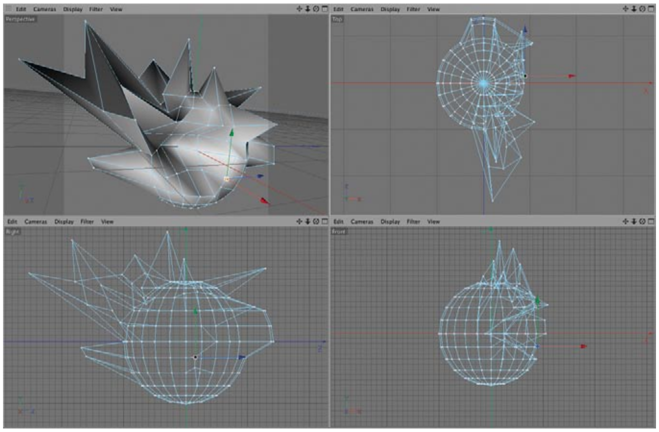
1 Click and hold the Live Selection button in the top Toolbar to reveal the Selection palette. Select the Lasso option when the palette appears. Next, click the Point Tool button in the Toolbar at the left.



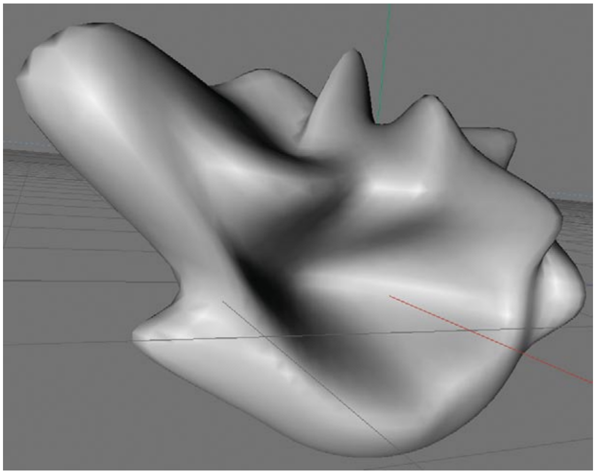
2 Click and drag over the area near the front of the sphere. This action will select all the points in your selected area. When the axis handles appear, drag the red one, the X, toward the back of the scene.

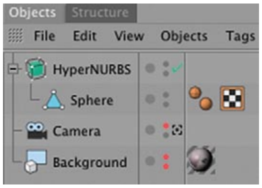


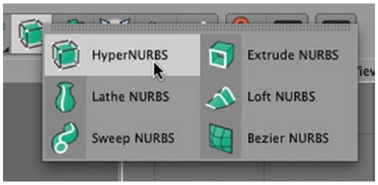
3 Use this same method to select only the innermost four points within this cluster of modified points and drag them even further back along the X axis. This will create a smaller, deeper recessed area within the shape.


Edit Cameras Display Filter View
Edit Cameras Display Filter View
Edit Cameras Display Filter View
Edit Cameras Display Filter View

27 Have some fun editing the shape using these methods. Feel free to tweak points, polygons, and edges as you see fit. Also feel free to use the navigational icons in the upper-right side of the image to rotate, reposition, and zoom in or out of the view as you work. Clicking the far-right navigational icon will revert the interface to a four-up view. You will likely find it beneficial to work on your shape in views other than just the perspective view. This will give you a better grasp of the way the shape appears in 3D space and provides more control while editing. To work in a different view, simply click inside that panel and continue to edit the shape.



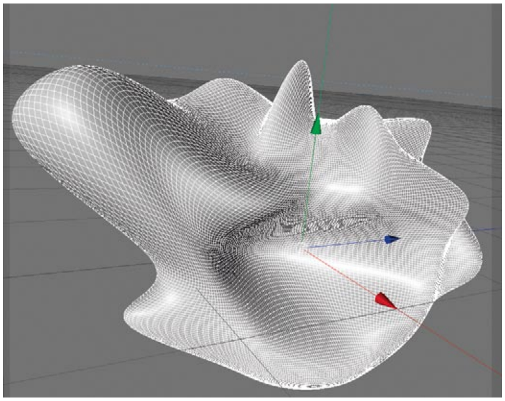

Objects
Structure
File
Edit
View
Objects
Tags
HyperNURBS
Sphere
Camera
Background

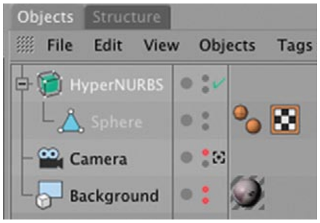

HyperNURBS
Extrude NURBS
Lathe NURBS
Loft NURBS
Sweep NURBS
Bezier NURBS

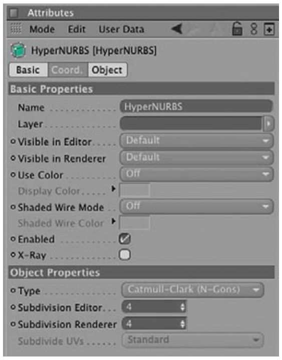
28 Click and hold the HyperNurbs Object button in the top Toolbar to open the Nurbs Object palette. Select the HyperNurbs object to add this object to the scene. In the Object Manager, drag it to the top of the hierarchy if it is not already there. Then, in the Object Manager, drag the sphere object onto the HyperNurbs object. This will make the sphere object a child of the HyperNurbs object. The HyperNurbs object will gently smooth out all the sharp edges of your manipulated sphere object, giving it a more organic appearance.

A nondestructive workflow

Always remember that files are constructed in a modular and editable manner in Cinema 4D. This means that although you have placed your manipulated sphere inside a HyperNurbs object, you can still edit the sphere independently of the Nurbs object, and vice versa. Think of it as a similar procedure to placing a layer inside a group in Photoshop. While the group contains the layer and has an effect on it, the layer can be edited on its own; the same holds true with the group. Furthermore, you can remove a layer from a group at any point in Photoshop. This is also true for the sphere object within the HyperNurbs object in Cinema 4D and holds true for any child/parent relationship within the Object Manager.







HyperNURBS [HyperNURBS]

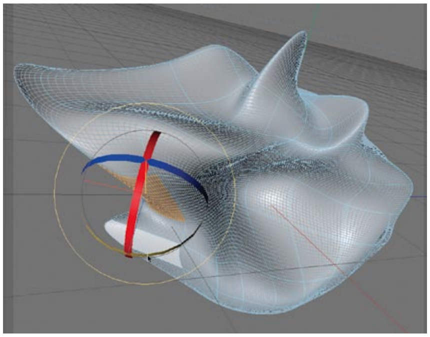
Basic Properties

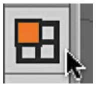
Name . . . . . HyperNURBS
Layer . . . . .
Visible in Editor . . . . . Default
Visible in Renderer . . . . . Default
Use Color . . . . . Off
Display Color . . . . .
Shaded Wire Mode . . . . . Off
Shaded Wire Color
Enabled . . . . . ☑
X-Ray . . . . . ☐

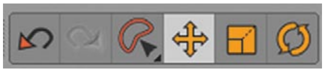
Object Properties

Type . . . . . Catmull-Clark (N-Gons)
Subdivision Editor . . . 4
Subdivision Renderer 4
Subdivide UVs . . . . . . Standard

29 One thing you will notice is that portions of the surface will look somewhat jagged and still show subtle polygonal edges, even after the advent of the HyperNurbs object. To remedy this, click the HyperNurbs object in the Object Manager to select it. Then, in the Object tab of the Attributes manager below, increase the Subdivision Editor and the Subdivision Renderer to 4 in each case. In this instance it worked fine. You might find that a different setting works better for you. However, don't increase it beyond what is necessary, since more subdivisions consume more memory and can slow the rendering process and viewport navigation.



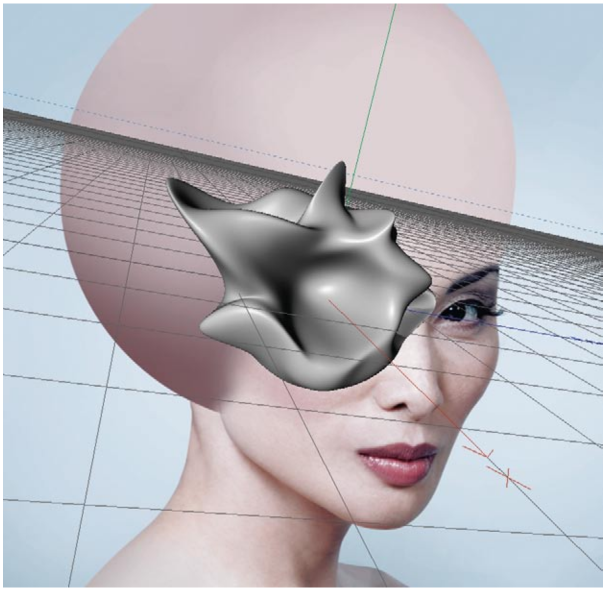


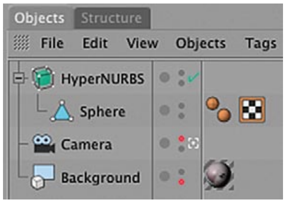


Scaling, moving, dragging

In case you haven't noticed, the Scale, Move, and Rotate tools come into play often while you're working in Cinema 4D. When you select an object and any of these tools, you'll notice that the X, Y, and Z axes are each represented by a single color. Using one axis only allows you to constrain what you're doing to that particular axis. With the Move tool, simply click and drag an arrowhead at the end of an axis. With the Rotate tool, simply click and drag one of the bands. Select the colored band that corresponds to the desired axis. Scaling works in the same manner, but you need to click and drag a box rather than an arrow or band. Clicking and dragging the object, not an axis, with any tool will affect all axes.

30 Now click the Sphere object in the Object Manager. Simply selecting it here makes it active; you can edit it further without dragging it out of the HyperNurbs object. This is a fine example of the modular approach of Cinema 4D that I keep going on and on about. Click the Polygon tool from the Toolbar at the left, then choose the Move tool from the Toolbar at the top. Click any polygon to select it. Previously, when we selected a polygon, point, or edge, we moved it within the scene, thus reshaping the object. However, this time we're going to take the manipulation of this object a step further. This time when you select a polygon, try then selecting the Rotate or Scale tool from the top Toolbar. Rotate and/or scale the selected polygon using the controls as they appear. Use this method on a number of different polygons until you're happy with the resulting shape.

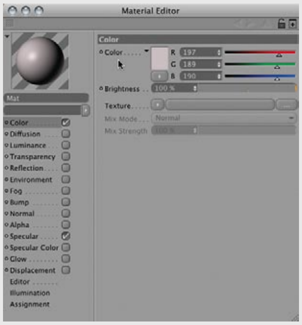




31 If necessary, click the upper-right navigational icon to switch to a single-pane view in the viewport. Choose Cameras > Scene Cameras > Camera from the menu to view the scene using the camera we created earlier. The angle and scale will change as you switch views. In the Object Manager, click the top Visibility button to the right of the Background object. This will remove the red dot and make it visible once again in the viewport. Use the navigational icons at the right to rotate, zoom, and reposition the scene within this camera view so that the angle of the object matches up nicely with the angle of the background image. Also, feel free to select your object in the Object Manager and then use the Scale and/or Rotate tools to adjust its actual size and position within the scene.

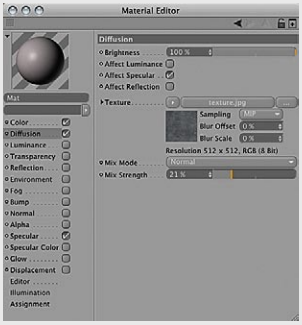
Creating a surface texture

Now we'll create a new material to map onto the current object and subsequent objects in the scene.



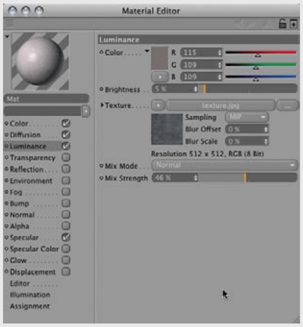
Color
Color: R 197, G 189, B 190
Brightness 100 %
Color ☑
Diffusion ☐
Luminance ☐
Specular ☑

1 Choose File > New Material from the Materials Manager menu. Double-click the new material thumbnail to open the Material Editor. In the Color channel, change the RGB color values to 197, 189, and 190.



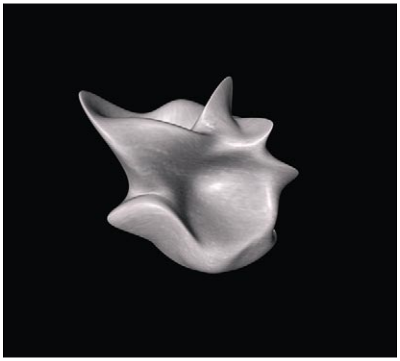
Diffusion
Brightness 100 %
Affect Luminance ☐
Affect Specular ☑
Affect Reflection ☐
Texture: texture.jpg
Blur Offset 0 %
Blur Scale 0 %
Resolution 512 x 512, RGB (8 Bit)
Mix Mode: Normal
Mix Strength 21 %
Color ☑
Diffusion ☑
Luminance ☐
Specular ☑

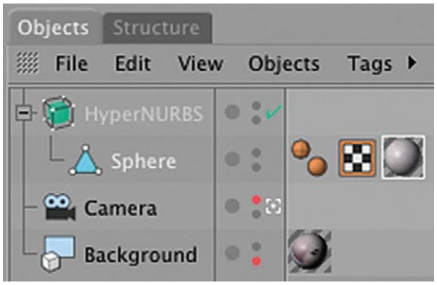
2 Click the Diffusion channel at the left, directly underneath Color, and enable it by clicking the check box. Click the horizontal bar to the right of Texture in the diffusion options. Select the texture.jpg file from within the downloadable project files. Scale down the Mix strength to 21%.

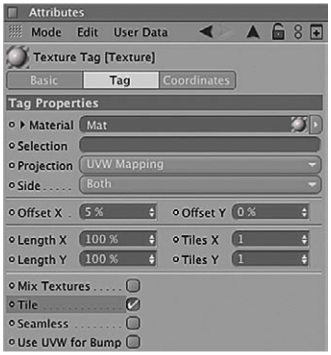


Luminance
Color: R 115, G 109, B 109
Brightness 5 %
Texture: texture.jpg
Blur Offset 0 %
Blur Scale 0 %
Resolution 512 x 512, RGB (8 Bit)
Mix Mode: Normal
Mix Strength 46 %
Color ☑
Diffusion ☑
Luminance ☑
Specular ☑

3 Click the Luminance channel beneath Diffusion and enable the corresponding check box. Set the RGB color to 115, 109, 109. Set the Brightness to 5%. Again, click the horizontal bar to the right of Texture and navigate to the same texture.jpg file. Reduce the Mix Strength to 46%.




Objects
Structure
File
Edit
View
Objects
Tags
HyperNURBS
Sphere
Camera
Background

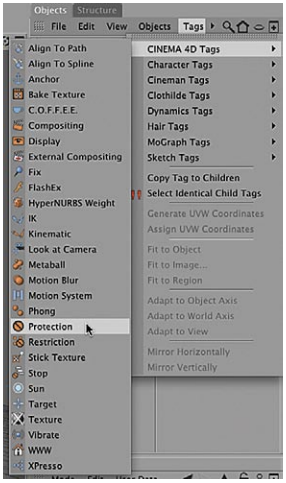

Attributes
Mode
Edit
User Data
Basic
Tag
Coordinates

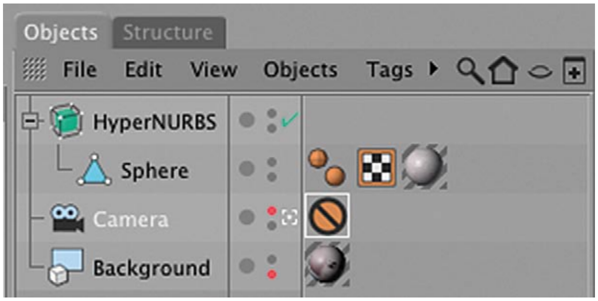
Texture Tag [Texture]

Tag Properties

Material Mat
Selection
Projection UVW Mapping
Side Both
Offset X 5 %
Offset Y 0 %
Length X 100 %
Tiles X 1
Length Y 100 %
Tiles Y 1
Mix Textures ☐
Tile ☑
Seamless ☐
Use UVW for Bump ☐

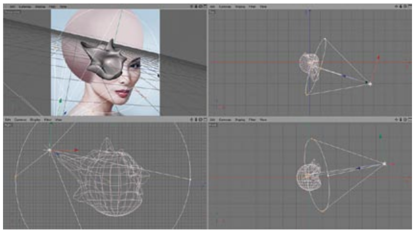
32 Close the Material Editor and add the material to the object by dragging the material thumbnail either from the Materials Manager onto it in the viewport or directly onto the object in the Object Manager. Regardless of how you actually do this, you'll notice a texture tag appear to the right of your object in the Object Manager. Click the texture tag in the Object Manager and then direct your attention to the Attributes Manager beneath it. You'll notice that by default, the projection is set to UVW Mapping, which looks pretty good. However, if you do a quick test rendering by pressing Control-R (or Command-R), it is likely that the texture will create the appearance of a vertical seam on the surface of the object. To remedy this, increase the Offset X value slightly and then do another quick test rendering. If it is fine, leave it as is. If it's not, increase the offset and try it again. In this case, a 5% offset was fine.

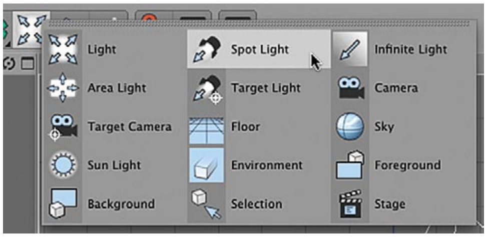

Objects
Structure
File
Edit
View
Objects
Tags
Align To Path
Align To Spline
Anchor
Bake Texture
C.O.F.F.E.E.
Compositing
Display
External Compositing
Fix
FlashEx
HyperNURBS Weight
IK
Kinematic
Look at Camera
Metaball
Motion Blur
Motion System
Phong
Protection
Restriction
Stick Texture
Stop
Sun
Target
Texture
Vibrate
WWW
XPresso
CINEMA 4D Tags
Character Tags
Cineman Tags
Clothilde Tags
Dynamics Tags
Hair Tags
MoGraph Tags
Sketch Tags
Copy Tag to Children
Select Identical Child Tags
Generate UVW Coordinates
Assign UVW Coordinates
Fit to Object
Fit to Image...
Fit to Region
Adapt to Object Axis
Adapt to World Axis
Adapt to View
Mirror Horizontally
Mirror Vertically

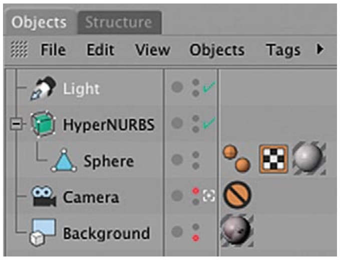

Objects
Structure
File
Edit
View
Objects
Tags
HyperNURBS
Sphere
Camera
Background

33 We've spent a fair amount of time so far positioning our object in the scene and using the background image as a reference. Right now, in our camera view, things are looking exactly as we want them to. So now would be a good time to lock the camera, so to speak. The way to do this in Cinema 4D is to add a protection tag to the camera. First, click the camera in the Object Manager and then choose Tags > Cinema 4D Tags > Protection from the Object Manager menu. You'll see the protection tag added to the camera in the Object Manager. This will prevent you from altering the camera, helping maintain consistency later on as we begin to render image files.

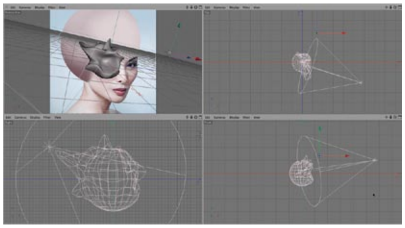
PART FOUR: Lighting the scene

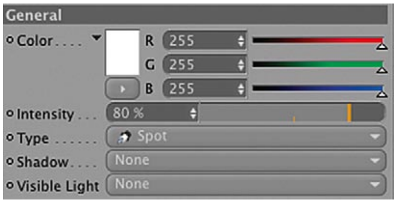



Light
Spot Light
Infinite Light
Area Light
Target Light
Camera
Target Camera
Floor
Sky
Sun Light
Environment
Foreground
Background
Selection
Stage

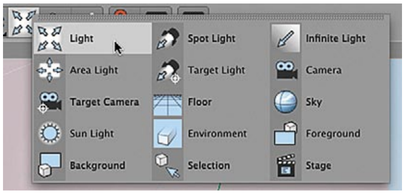

Objects
Structure
File
Edit
View
Objects
Tags
Light
HyperNURBS
Sphere
Camera
Background

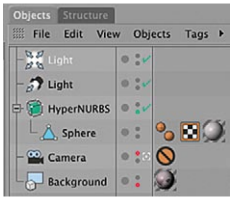
34 Click and hold the Scene Objects button in the top Toolbar. Select the Spotlight Object and release the mouse button to create a new spotlight within the scene. Click the upper-right navigational button to switch to a four-up view if you aren't there already. Select the spotlight in the Object Manager and then use the Move and Rotate tools from the top Toolbar to reposition the light so that it is shining down slightly on the object and a little to the left of it. It is likely that you'll need to perform the rotations and movements in more than a single pane in the viewport to get it right. Also, you'll see a large circular shape, indicating the outer edge of the light. Click one of the points of this circle and drag outward to adjust the outer angle, which makes the beam of light appear wider.

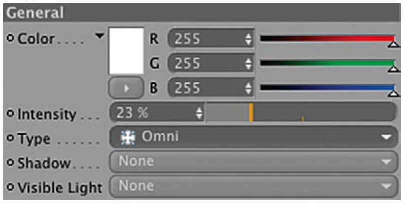




General
Color . . . . R 255 G 255 B 255
Intensity . . . 80 %
Type . . . . . . Spot
Shadow . . . . None
Visible Light None


Light
Spot Light
Infinite Light
Area Light
Target Light
Camera
Target Camera
Floor
Sky
Sun Light
Environment
Foreground
Background
Selection
Stage


Objects
Structure
File
Edit
View
Objects
Tags
Light
Light
HyperNURBS
Sphere
Camera
Background

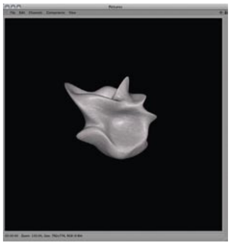


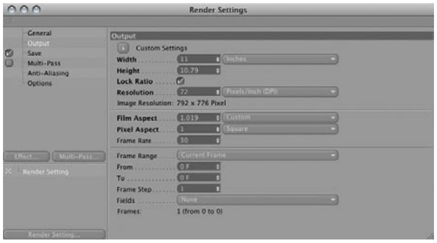
General
Color . . . . R 255 G 255 B 255
Intensity . . . 23 %
Type . . . . . . Omni
Shadow . . . . None
Visible Light None

35 Click the spotlight in the Object Manager. Once you've selected the spotlight, direct your attention to the General tab of the Attributes Manager. Here, reduce the intensity of the light to about 80%. Next, click and hold the Scene Objects button to reveal the Scene Objects palette and then select the Light object to add an omni light to the scene. This light will be used as a fill light to lighten the shadows. Again, use the various panels in the four-up view to position the light so that it fills some of the darker shadow regions with a bit of light. While the light is selected in the Object Manager, reduce its intensity to around 23% in the General tab of the Attributes Manager.

PART FIVE: Rendering the scene

36 Ensure that your Camera view is the active view in the viewport. Choose Render > Render Settings from the menu. You can leave the setting in the General category set to Full Render. In the Output category, the size will be set to the same size as your Background object. Enable the Lock Ratio check box. After that, increase the size by an inch or so in either the height or width field so that the rendered output is a little larger yet remains proportionally accurate. Enable the Save check box at the left and click Save to enter the Save category. In the Regular Image settings, enable the Save check box. Then choose a path for the saved file by clicking the … button. Specify a destination for the rendered file and name it rendering1. Set the format to TIFF (PSD Layers) and the depth to 8 Bit/Channel. Enable the Alpha Channel check box as well as the 24-bit dithering option. Close the Render Settings and then choose Render > Render To Picture Viewer from the menu.




Render Settings
General
Output
Save
Multi-Pass
Anti-Aliasing
Options
Effect...
Multi-Pass...
Render Setting
Render Setting...

Output

Custom Settings

Width 11 Inches

Height 10.79

Lock Ratio ☑

Resolution 72 Pixels/Inch (DPI)

Image Resolution: 792 x 776 Pixel

Film Aspect 1.019 Custom

Pixel Aspect 1 Square

Frame Rate 30

Frame Range Current Frame

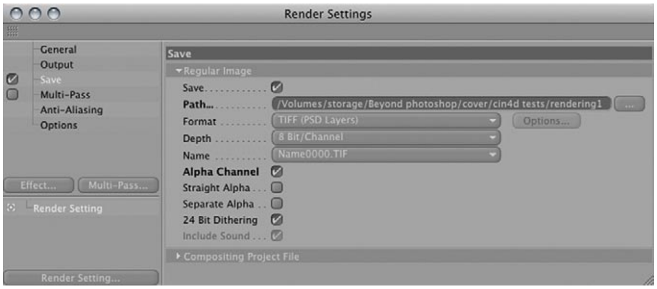
From 0 F

To 0 F

Frame Step 1

Fields None

Frames: 1 (from 0 to 0)


Render Settings
General
Output
Save
Multi-Pass
Anti-Aliasing
Options
Effect...
Multi-Pass...
Render Setting
Render Setting...
Options...
Compositing Project File

Save

Regular Image

Save ☑

Path... /Volumes/storage/Beyond photoshop/cover/cin4d tests/rendering1

Format TIFF (PSD Layers)

Depth 8 Bit/Channel

Name Name0000.TIF

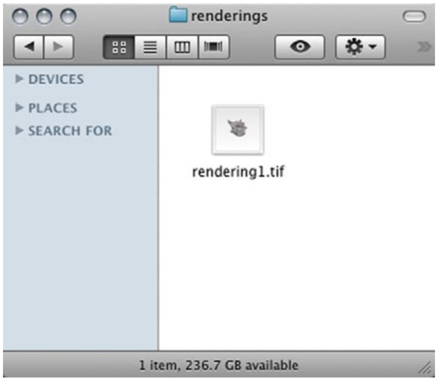
Alpha Channel ☑

Straight Alpha ☐

Separate Alpha ☐

24 Bit Dithering ☑

Include Sound ☑


renderings
DEVICES
PLACES
SEARCH FOR

rendering1.tif

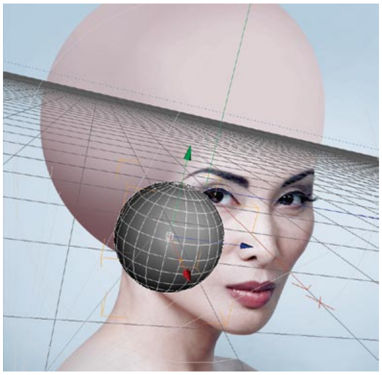
1 item, 236.7 GB available

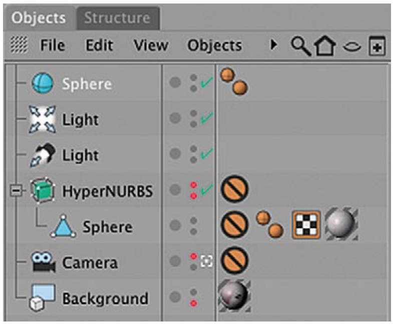
Render larger

I suggest rendering things a bit larger than actual size. This way, if you want the components to appear a little larger within the Photoshop file afterward, you'll have the resolution you need. It is never a problem to reduce the size a little in Photoshop, but I advise against scaling anything larger than the actual resolution allows.

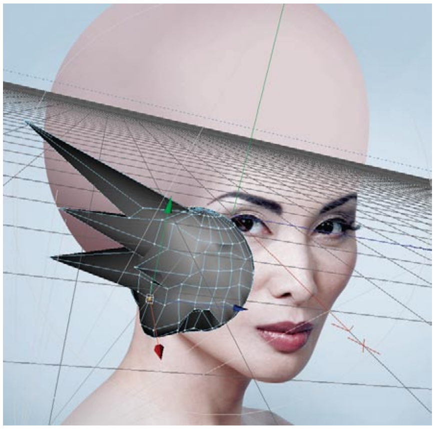
37 The file will immediately be rendered to the Picture Viewer. Don't worry about saving the file; it is automatically saved after rendering as per your specifications in the Save section of the Render settings. Go ahead and look in the file directory within the operating system of your computer to verify that the rendered file was indeed placed in the destination that you specified. If, for any reason, your file does not appear in your specified destination, you can choose File > Save Picture As from the Picture Viewer menu and specify a location to save the rendered image. When you're satisfied that the rendered file is where you want it be, go ahead and close the Picture Viewer.

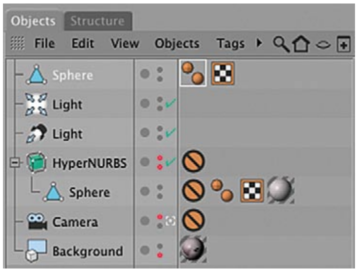
PART SIX: Repeating the process



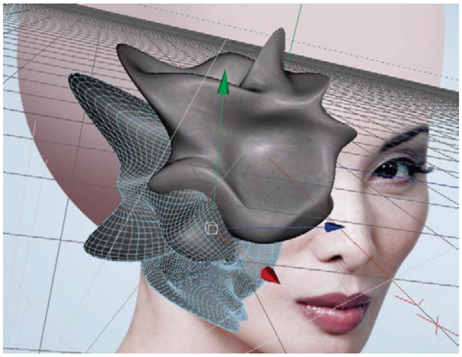

Objects
Structure
File
Edit
View
Objects
Sphere
Light
Light
HyperNURBS
Sphere
Camera
Background

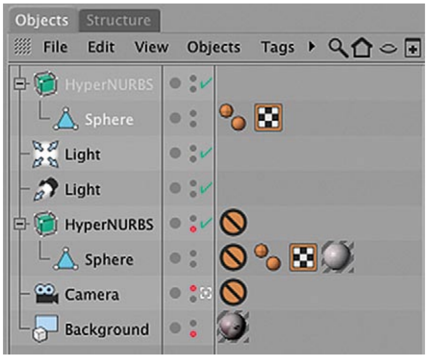
38 In the Object Manager, click the Sphere, and then Control-click (or Control-click) on the HyperNurbs object to select them both. Choose Tags > Cinema4D Tags > Protection from the Object Manager menu to lock them both by adding protection tags to them. Next, click twice on each of the visibility dots to the right of the HyperNurbs object in the Object Manager until they both appear red, hiding the object from view as well as preventing it from rendering. We are finished with this object, but we might as well leave it in the file in case we need to access it later for something else. Create a new Sphere object in the Camera view and position it over her cheek at the left of the image.



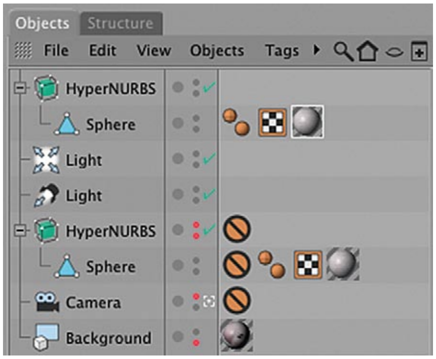

Objects
Structure
File
Edit
View
Objects
Tags
Sphere
Light
Light
HyperNURBS
Sphere
Camera
Background

39 Click the Make Object Editable button in the left Toolbar to make the sphere editable and then begin to edit the shape as you did previously with the other sphere. Click the Point tool, the Edge tool, or the Polygon tool to select a polygon, point, or edge of the object and then move it around within the scene via the Move tool in the top Toolbar. Basically, we want to create another shape to overlay her cheek in the Photoshop composition. We'll follow a similar process to that used to alter the previous shape, beginning by altering the actual geometry of the shape.

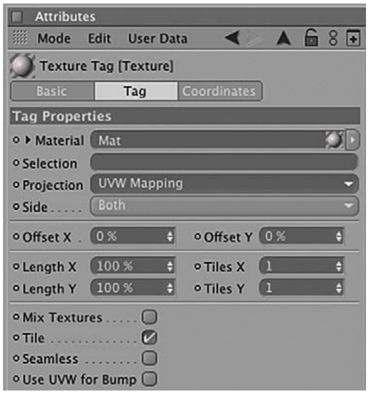



Objects
Structure
File
Edit
View
Objects
Tags
HyperNURBS
Sphere
Light
Light
HyperNURBS
Sphere
Camera
Background

40 After altering the geometry a little, create a new HyperNurbs object, just as you did last time. Then, in the Object Manager, drag the sphere into it. Ensure that the sphere is selected in the Object Manager and then continue to edit the geometry of the shape using the methods you used previously. Remember that you can do some interesting things by using the Rotate and Scale tools in the top Toolbar to modify polygons or sides. Also, remember that you can select a number of points, edges, or polygons on the shape by using the Lasso tool from the top Toolbar. Then you can modify the selected points as a group. When you think your shape is looking interesting, preview it with the other shape in the scene to gain an understanding of the relationship between the two in the composition. Click once on the top Visibility dot to the right of the hidden HyperNurbs object in the Object Manager to make it visible.


Objects
Structure
File
Edit
View
Objects
Tags
HyperNURBS
Sphere
Light
Light
HyperNURBS
Sphere
Camera
Background

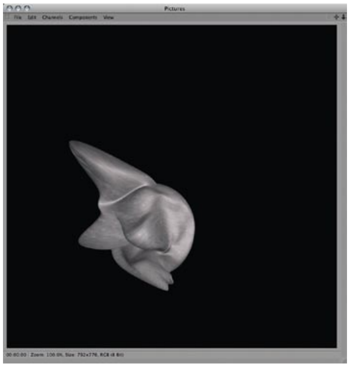
41 If you're happy with the visual relationship between the objects, double-click the same Visibility dot to hide it again. If not, continue to alter your current object as necessary until you're satisfied. Next, drag the most recent material you created onto the object in either the Object Manager or the viewport. After adding the material to the object, click the Texture tag in the Object Manager and try experimenting with some different projection settings in the Attributes Manager below. Each time you change the projection, do a quick render by clicking the Render Active View button in the top Toolbar. For the shape I created, the default UVW Mapping projection worked just fine. However, no two shapes will be alike, and you might find that a different projection works better for you. Or you could find that even though you are using UVW mapping, you might need to edit the offset amount, the way we did with the previous object.

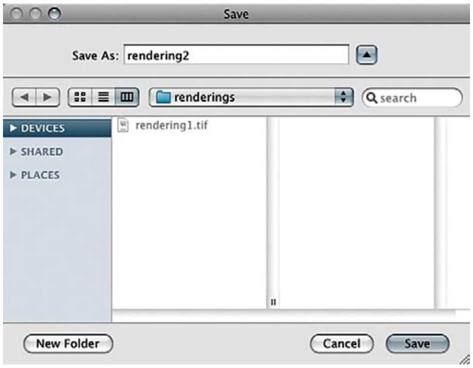

Attributes
Mode
Edit
User Data
Basic
Tag
Coordinates

Texture Tag [Texture]

Tag Properties

Material Mat
Selection
Projection UVW Mapping
Side Both
Offset X 0 % Offset Y 0 %
Length X 100 % Tiles X 1
Length Y 100 % Tiles Y 1
Mix Textures ☐
Tile ☑
Seamless ☐
Use UVW for Bump ☐




Save

Save As: rendering2

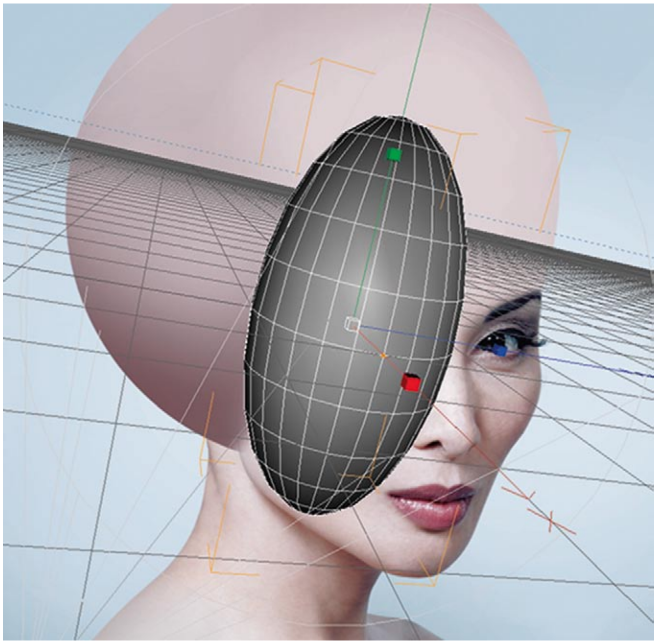
renderings

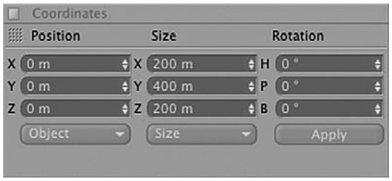
search

DEVICES
SHARED
PLACES

rendering1.tif

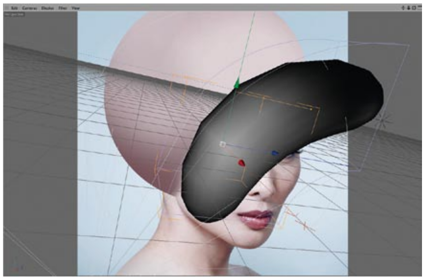
42 Choose Render > Render Settings from the menu. You can leave everything set up as it was previously, except for the Save category. Go to the Save setting and then click the … button to the right of the Path option. When prompted, change the name of the finished file to rendering2. Leave the destination the same so that it ends up in the same place as your first rendering. Close the render settings and then choose Render > Render to Picture Viewer from the menu. After the rendering is complete, go ahead and close the Picture Viewer window. This file will automatically be saved alongside your previous rendering.

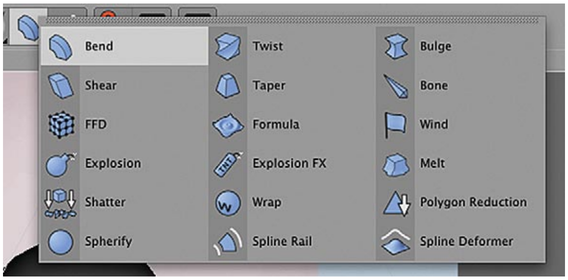


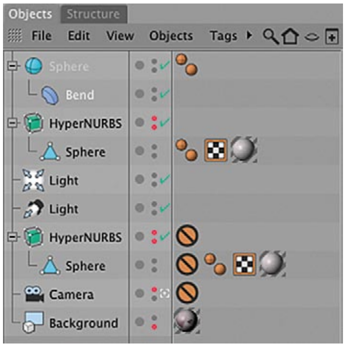

☐ Coordinates

Position		Size		Rotation	
X	0 m	X	200 m	H	0 °
Y	0 m	Y	400 m	P	0 °
Z	0 m	Z	200 m	B	0 °
Object		Size		Apply	

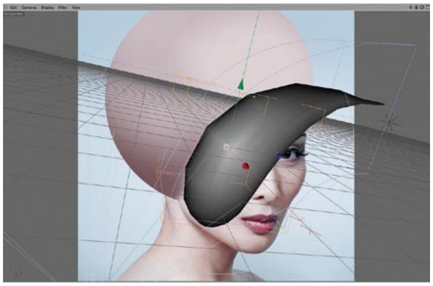
43 Now, as you did with the previous object, double-click both of the Visibility dots to the right of your HyperNurbs object in the Object Manager. This hides it from view in the viewport and ensures that it does not appear in any future renderings. The object is still there, it's just not visible. Now create another Sphere object. While the sphere is selected, click the Object Tool button in the Toolbar at the left. Then, in the Coordinates Manager, double the Y size in relation to the X and Z sizes.

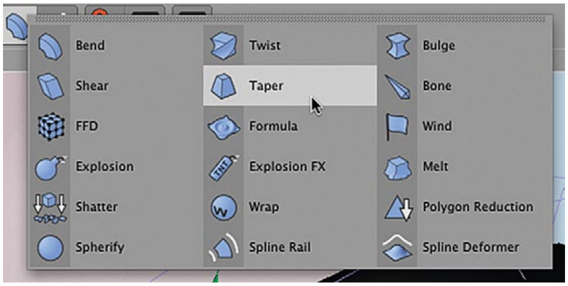


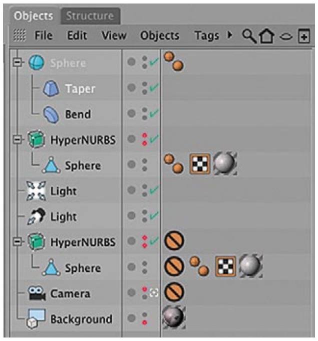

Bend
Twist
Bulge
Shear
Taper
Bone
FFD
Formula
Wind
Explosion
Explosion FX
Melt
Shatter
Wrap
Polygon Reduction
Spherify
Spline Rail
Spline Deformer


Objects
Structure
File
Edit
View
Objects
Tags
Sphere
Bend
HyperNURBS
Sphere
Light
Light
HyperNURBS
Sphere
Camera
Background

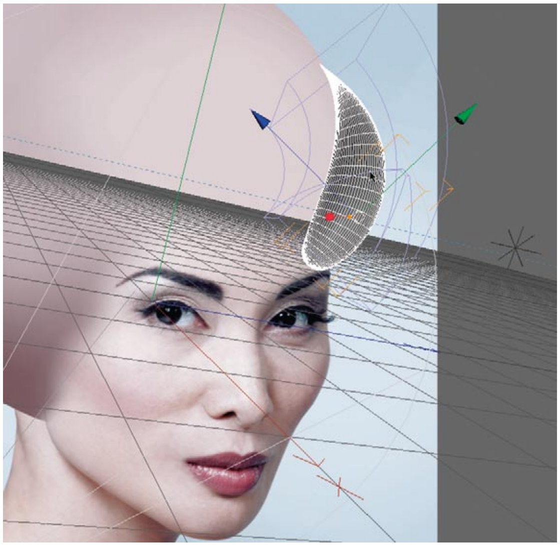
44 Click and hold the Deformers button in the top Toolbar to access the Deformers palette. Select the Bend deformer and then release the mouse button to create a new Bend deformer. In the Object Manager, drag the Bend deformer onto the modified Sphere to make the deformer a child of the sphere. Select the Bend deformer in the Object Manager and then, in the perspective viewport, click and drag the orange handle at the top of the deformer. Drag upward and the sphere will bend to the right. Keep dragging until it looks something like what is shown here.

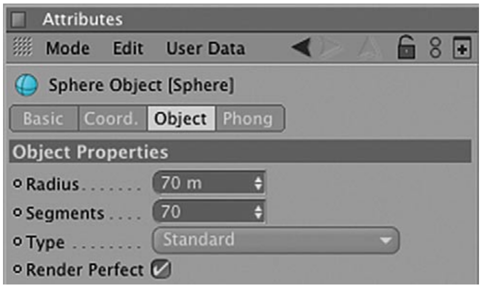



Bend
Twist
Bulge
Shear
Taper
Bone
FFD
Formula
Wind
Explosion
Explosion FX
Melt
Shatter
Wrap
Polygon Reduction
Spherify
Spline Rail
Spline Deformer


Objects
Structure
File
Edit
View
Objects
Tags
Sphere
Taper
Bend
HyperNURBS
Sphere
Light
Light
HyperNURBS
Sphere
Camera
Background

45 Now click the Deformers button again, and this time specify a Taper deformer from the palette to add it to the scene. Drag this deformer onto the Sphere object in the Object Manager to make it a child of the sphere, just as you did previously with the Bend deformer. Select the Taper deformer in the Object Manager and then click and drag the orange handle at the top in perspective viewport to taper the sphere. Drag downward until the sphere begins to resemble what is shown here.





Attributes

Mode
Edit
User Data

Sphere Object [Sphere]

Basic
Coord.
Object
Phong

Object Properties

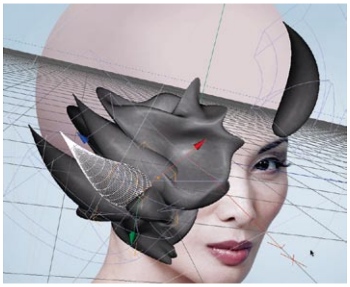
○ Radius . . . . . . 70 m

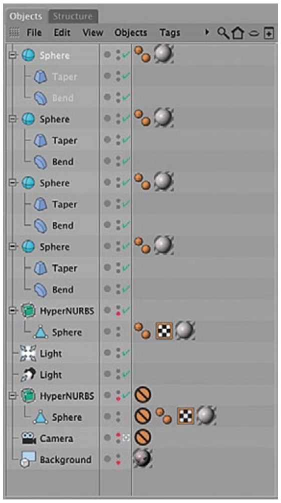
○ Segments 70

○ Type . . . . Standard

○ Render Perfect ☑

46 You will notice that the resulting sphere is not smooth and that there are jagged, polygonal edges visible. To remedy this, select the Sphere in the Object Manager. After the sphere is selected, increase the number of segments until it appears smooth in the Attributes Manager. Also, try playing with the Radius setting until you see the ideal shape begin to present itself. While the Sphere itself is selected, use the Move, Rotate, and Scale tools in the top Toolbar to position it nicely over her eye at the right of the image.





Objects
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Taper
Bend
Sphere
Taper
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Sphere
Taper
Bend
HyperNURBS
Sphere
Light
Light
HyperNURBS
Sphere
Camera
Background

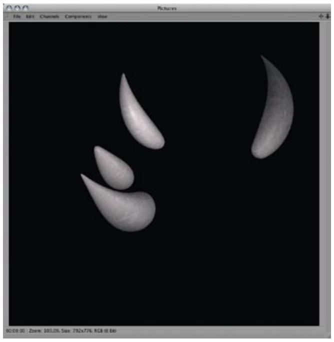
47 Now drag the same material from the Materials Manager onto the object in either the viewport or the Object Manager to add a Texture tag to it. Control-click (or Control-click) the sphere in the Object Manager and drag it upward to duplicate it. With the duplicate selected, use the Move, Rotate, and Scale tools in the top Toolbar to reposition, rotate, and resize it within the scene. Create more duplicates of the object using this method. Then, enable the visibility of your two original HyperNurbs objects to aid in positioning the new objects. It doesn't matter whether the new objects are touching the older HyperNurbs objects; we'll be hiding the visibility of the HyperNurbs objects again shortly.

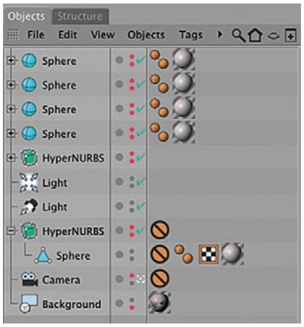
Expanding/collapsing

In the Object Manager, you'll notice that the available space fills up quickly as you continually add objects to your scene. However, each parent object has a small box to the left of it within the Object Manager; if the children of this parent are visible, clicking this icon will collapse the object, hiding the children from view. If you want to expand a parent object that is collapsed, simply click the same icon to expand it, revealing the children contained within.

Selecting points

Sometimes it can be difficult to select a specific point on a spline object, especially when the points are very close together. Try zooming in very close; or, if the same point remains selected no matter what, it can be easier to click the background so that no single point is selected, then click the point you want to select. Alternatively, you can press Alt-d (or Option-d) to hide the axis handles. If the handles are hidden, executing the same command will reveal them.




Objects
Structure
File
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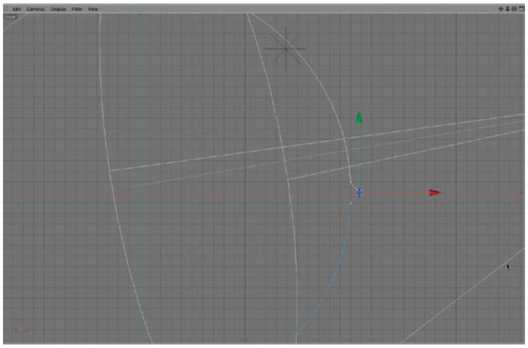
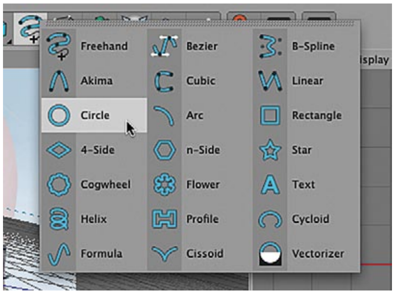
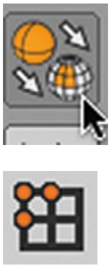
Objects
Tags
Sphere
Sphere
Sphere
Sphere
HyperNURBS
Light
Light
HyperNURBS
Sphere
Camera
Background

48 Hide the visibility of the HyperNurbs objects when you're happy with the placement of your duplicated objects in the scene. Also, you can edit the deformers that are children of your spheres at any point. To edit the effect of a deformer, simply select it in the Object Manager and then click and drag the orange handle that appears in the viewport. Next, choose Render > Render Settings from the menu. Again, in the Save options, click the ... button in the Path field and then name the file rendering3. Next, choose Render > Render To Picture Viewer from the menu, to render the scene in its current state. After rendering, close the Picture Viewer and then double-click both Visibility dots to right of each sphere object in the Object Manager, to hide them from view and prevent them from appearing in future renderings.

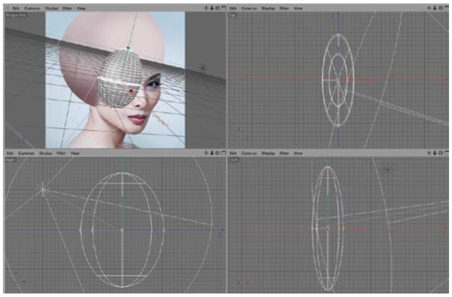
PART SEVEN: Working with spline objects

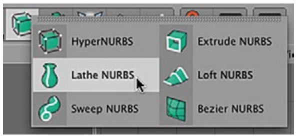


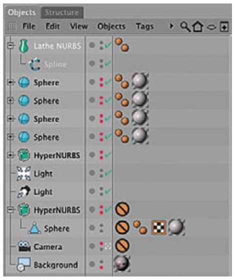

Freehand
Bezier
B-Spline
Akima
Cubic
Linear
Circle
Arc
Rectangle
4-Side
n-Side
Star
Cogwheel
Flower
Text
Helix
Profile
Cycloid
Formula
Cissoid
Vectorizer
isplay



49 Click the top-right navigational icon in the view port to switch back to a four-up view. Click and hold the Spline Object button in the top Toolbar to reveal the Spline Object palette. Select the Circle option and release the mouse button to create a circular spline object within the scene. To edit the spline, click the Make Object Editable button and then select the Point tool from the Toolbar at the left. Select the Front viewport. Zoom in on the right side of the circle using the navigational buttons at the upper right. Control-click (or Control-click) just above and just below the point at the right to create two additional points on the spline. Then select the original point between the two and drag it slightly to the right.




HyperNURBS
Extrude NURBS
Lathe NURBS
Loft NURBS
Sweep NURBS
Bezier NURBS


Objects
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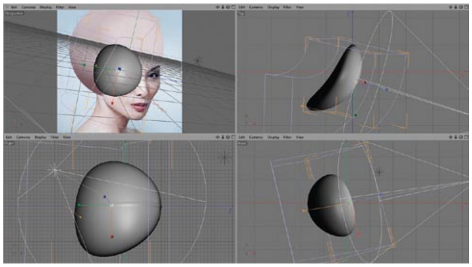
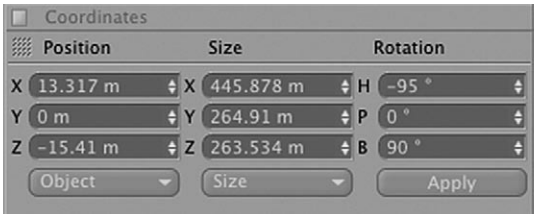
File
Edit
View
Objects
Tags
Lathe NURBS
Spline
Sphere
Sphere
Sphere
Sphere
HyperNURBS
Light
Light
HyperNURBS
Sphere
Camera
Background

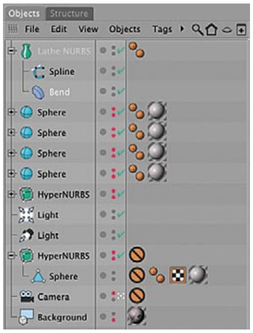
50 Click the HyperNurbs button in the top Toolbar and select Lathe Nurbs from the palette to create a new Lathe Nurbs object. In the Object Manager, drag the spline object onto the new Lathe Nurbs object to make the spline a child of the Lathe Nurbs object. Immediately, you will see the results of the Lathe Nurbs object. Next, click the Object tool in the left Toolbar and then select the Scale tool from the top Toolbar. Click and drag the X, Y, and Z handles in the view port separately, to reshape the object until it resembles what is shown here. Examine all the views, not just the camera view. The Front and Top views especially provide a clear view of the shape after scaling.





Coordinates

Position		Size		Rotation	
X	13.317 m	X	445.878 m	H	-95 °
Y	0 m	Y	264.91 m	P	0 °
Z	-15.41 m	Z	263.534 m	B	90 °
Object		Size		Apply	


Objects
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Lathe NURBS
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HyperNURBS
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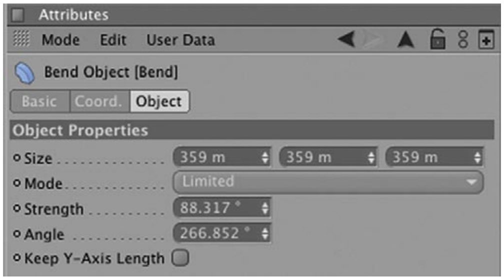
Camera
Background

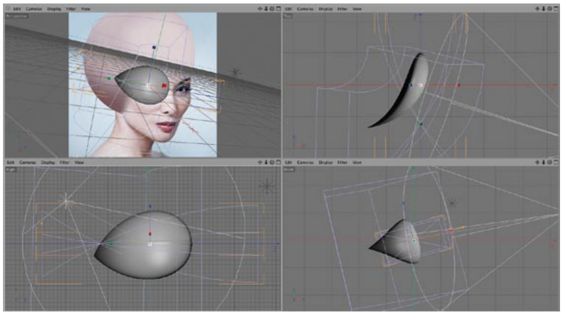

Attributes
Mode
Edit
User Data
Basic
Coord.
Object

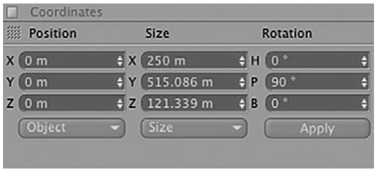
Bend Object [Bend]

Object Properties

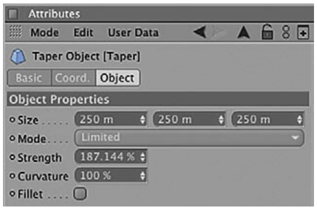
- Size: 359 m, 359 m, 359 m
- Mode: Limited
- Strength: 88.317 °
- Angle: 266.852 °
- Keep Y-Axis Length ☐

51 Click the Deformers button in the top Toolbar and select the Bend deformer. In the Object Manager, place the Bend deformer inside the Lathe Nurbs object and drag it beneath the spline object. Select the Rotate tool in the top Toolbar. Rotate the X axis by about −95 degrees and the Z axis by about 90 degrees. Next, click the Object tool in the left Toolbar and then select the Scale tool from the top Toolbar. Resize the Bend deformer so that it fits around the object a little tighter. Now, click and drag the orange handle to bend the spline. Here, you can see the effect that the rotated and scaled Bend deformer has on my shape. For your reference, I am showing you the object properties of my Bend deformer in the Attributes Manager. Also, here's a view of the exact size and rotation in the Coordinates Manager. If you plan to type these values in, be sure that you have the Object tool selected when you do it. It is fine if your attributes and coordinates differ from these, as long as your shape begins to resemble the one shown here. I have changed the Display in each viewport to Gouraud shading so that you can see the effect clearly.



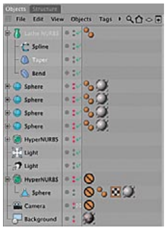

Coordinates
Object
Size
Apply

Position	Size	Rotation
X 0 m	X 250 m	H 0°
Y 0 m	Y 515.086 m	P 90°
Z 0 m	Z 121.339 m	B 0°


Attributes
Mode
Edit
User Data
Basic
Coord.
Object

Taper Object [Taper]

Object Properties
Size 250 m 250 m 250 m
Mode Limited
Strength 187.144 %
Curvature 100 %
Fillet ☐


Objects
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Bend
Sphere
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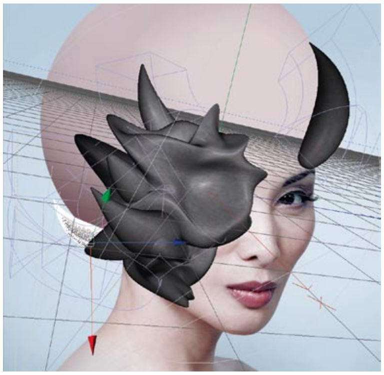
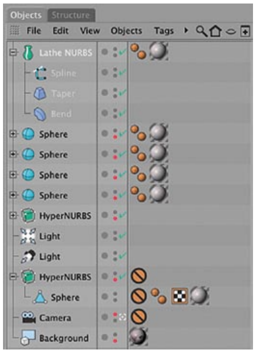
HyperNURBS
Light
Light
HyperNURBS
Sphere
Camera
Background

52 Again, click the Deformer button in the top Toolbar and select the Taper deformer from the Deformer palette. Select the Rotate tool from the top Toolbar and rotate the Taper deformer 90 degrees along the Y axis. As you did previously while working on the Bend deformer, click the Object tool if it is not currently active, and then select the Scale tool in the top Toolbar. Scale the X, Y, and Z axes separately so that the Taper deformer fits nicely around your shape. Click and drag the orange handle to taper the object. Here again is a glimpse of the size and rotation of the deformer in the Coordinates Manager as well as the object properties of the Taper in the Attributes Manager. Again, it is fine if yours differs slightly, just try to create something that resembles what is shown here.

Embrace the nondestructive

When editing Taper and Bend deformations that are applied to this particular spline object, you'll notice that hierarchy plays an important role. Try moving them up or down in the Object Manager, changing their place within the object hierarchy. You'll notice that this changes the final result of both deformers as it applies to the spline. However, you must ensure that they remain beneath the spline. Also, an important thing to point out is that you may edit a deformer and then apply another, only to find yourself tweaking them both here and there to achieve an optimal result. I find this back-and-forth process an intuitive way to




Objects
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Lathe NURBS
Spline
Taper
Bend
Sphere
Sphere
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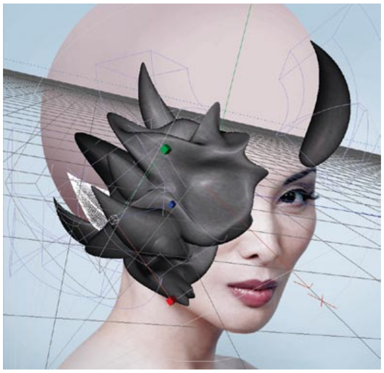
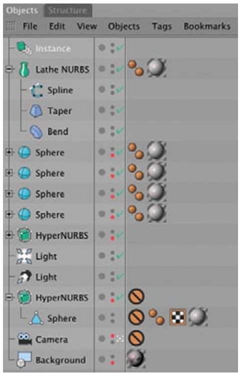
Sphere
HyperNURBS
Light
Light
HyperNURBS
Sphere
Camera
Background

53 Drag the material onto the Lathe Nurbs object in either the viewport or the Object Manager to add it as a Texture tag. You can play with other Projection options in the Tag Properties within the Attributes Manager. In the case of this object I have created here, the default UVW mapping seems fine. However, yours may differ slightly, so feel free to offset or try another mapping option that suits your shape. In the Object Manager, click the Visibility dot to the right of each sphere and the Nurbs object that is hidden from view. Use these as a guide for placing your new shape so that it falls in the lower region of the back of her head. Use the Move and Rotate tools from the Toolbar at the top to rotate and reposition the object as necessary.

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Tags
Bookmarks
Instance
Lathe NURBS
Spline
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Bend
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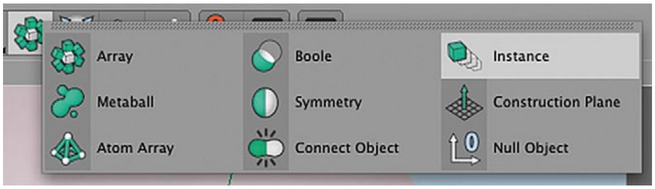
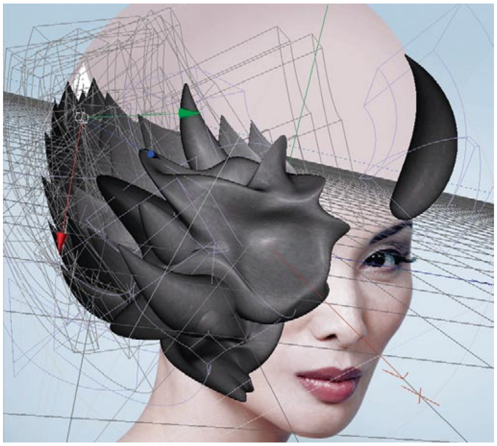
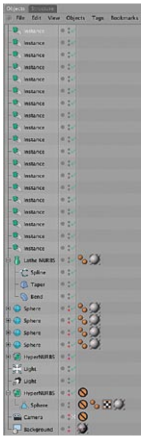
Camera
Background


Array
Boole
Instance
Metaball
Symmetry
Construction Plane
Atom Array
Connect Object
Null Object

54 Ensure that the Lathe Nurbs object is selected in the Object Manager. Then click and hold the Second Generators button in the top Toolbar to reveal the Second Generators palette. Choose the Instance option to create an instance of the Lathe Nurbs object. Use the Move and Rotate tools to rotate and position the object within the scene. The instance will automatically be placed in the same location as the original, so you'll need to move it to where you want it. At this point we're only concerned with how the objects are positioned and how they relate to each other visually within the Camera view. It doesn't really matter if they appear to be all over the place in other views. This artwork is destined to be rendered and then placed in a 2D composition in Photoshop, so a proper relationship within 3D space is not really important.

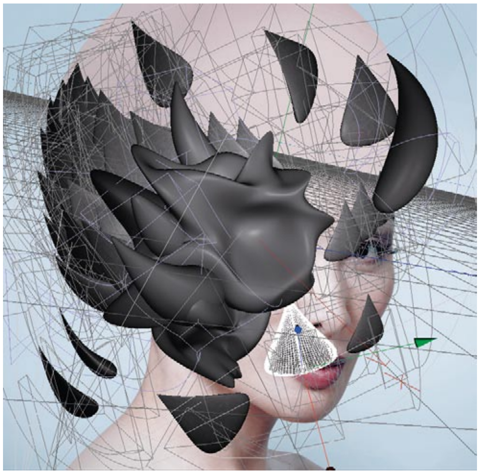


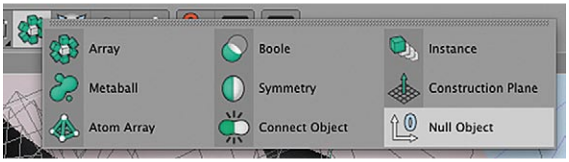


55 Control-click (or Control-click) on the Instance object in the Object Manager and drag it upward to create a duplicate of it. Use the Move and Rotate tools to reposition the duplicate instance within the camera view. Repeat this process a number of times until you've created a nice layered effect of these instances that fits nicely into the empty area at the back of her head. Also, note that you can use the Object tool at any point to scale an individual instance, altering its proportion.

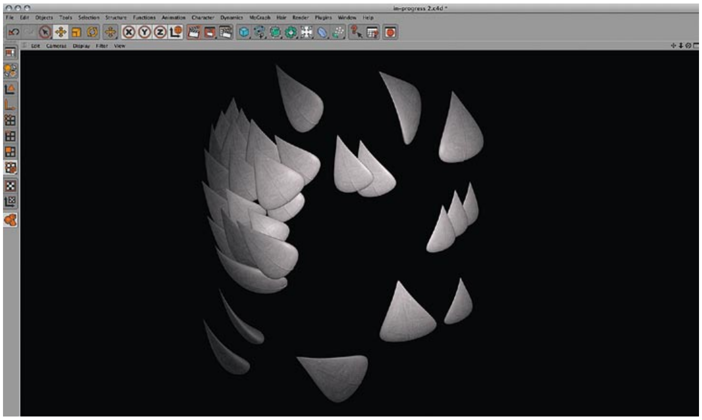
Why instances?

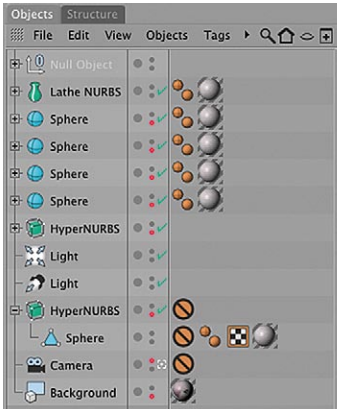
An instance is a duplicate of an object. The thing that makes an instance unique is that it lacks its own geometry and simply refers back to the original shape for this data. It is there in the scene, but the file size is much smaller because you're not duplicating the same geometry over and over again. Also, any edits you perform to the original object are immediately updated in all the instances of that object.




Array
Boole
Instance
Metaball
Symmetry
Construction Plane
Atom Array
Connect Object
Null Object

56 Now try adding some other duplicates of the instances at different locations within the scene. Just ensure that they do not touch or overlap the existing ones. These are there just in case we want to scatter some more around as singular objects or clusters of objects while compositing in Photoshop. There is a chance that we will never use these, but I always feel that it is very easy to create a little extra while you're at it. Anything you don't want after rendering can be deleted or masked in the final composition. When you're satisfied with what you scattered around, click and hold the Generators button in the top Toolbar and choose Null Object.




Objects
Structure
File
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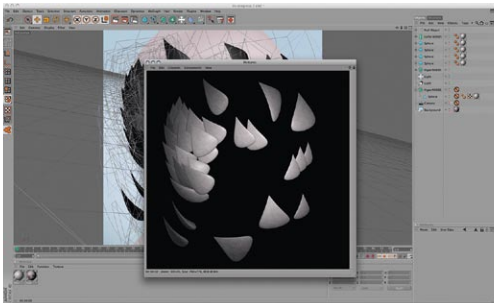
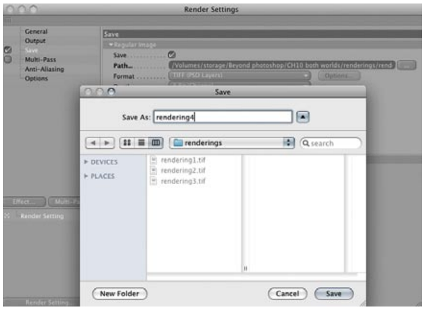
View
Objects
Tags
Null Object
Lathe NURBS
Sphere
Sphere
Sphere
Sphere
HyperNURBS
Light
Light
HyperNURBS
Sphere
Camera
Background

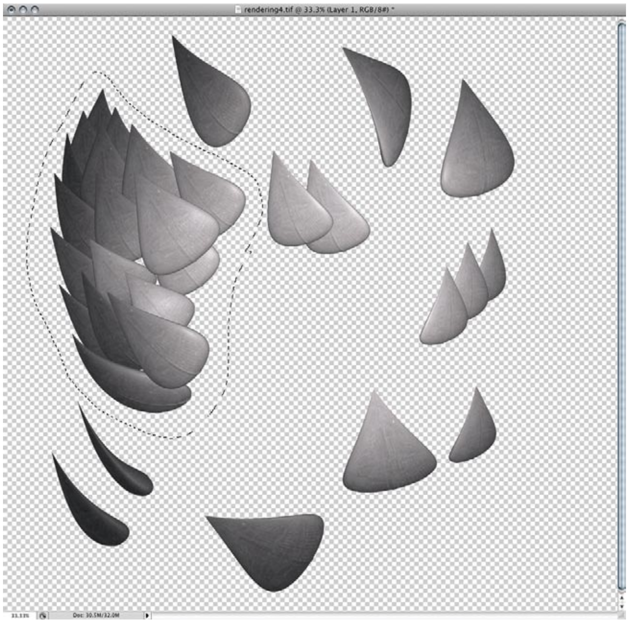
57 Click the very bottom instance object in the Object Manager and then Shift-click the very top instance object in the Object Manager, to select all the instances. Drag the selected instances onto the Null object you just created to contain them all somewhere. Then collapse the Null object in the Object Manager to instigate a bit of order within the Object Manager. When you're creating duplicate after duplicate as we've done here, it doesn't take long to fill the Object Manager with dozens of objects, making it an effort to wade through later. Think of a Null object in Cinema 4D as the equivalent to a Layer Group in Photoshop. It is a nice tool that lets you contain things in the area of the interface that allows you to organize the content. Click once on the Render Active View button to test your rendering in the Camera view.

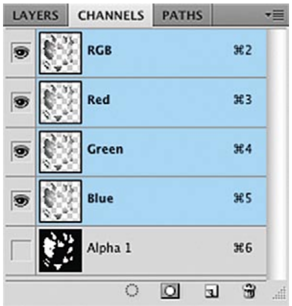


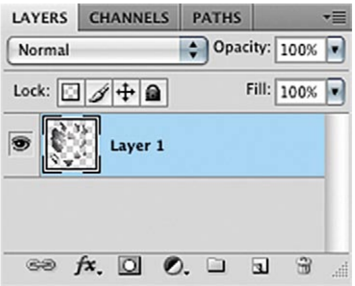

Render Settings
General
Output
Save
Multi-Pass
Anti-Aliasing
Options
Save
Save As: rendering4
renderings
DEVICES
PLACES
rendering1.tif
rendering2.tif
rendering3.tif
New Folder
Cancel
Save

58 Choose Render > Render Settings from the menu. Click Save at the left to access the Save options. Click the … button in the Path options. Change the name of the rendered file to rendering4. Close the Render settings and then choose Render > Render To Picture Viewer from the menu. After the file is rendered, close the Picture Viewer. Save and close your file.

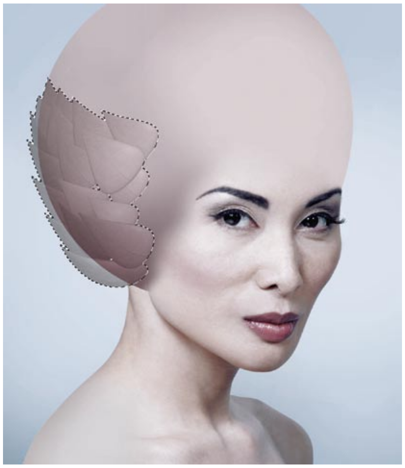
PART EIGHT: Returning to Photoshop

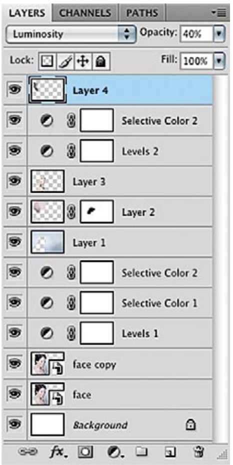

rendering4.tif @ 33.3% (Layer 1, RGB/8#) *


LAYERS
CHANNELS
PATHS
RGB ⌘2
Red ⌘3
Green ⌘4
Blue ⌘5
Alpha 1 ⌘6


LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 1

59 Return to your working file in Photoshop. If it is not open, go ahead and open it. Keep your working file open and then open the *rendering4.tif* file. In the *rendering4.tif* file, locate the alpha channel entitled *Alpha 1* in the Channels palette. Control-click (or Command-click) on the Channel's thumbnail to load the channel as a selection. Return to the Layers palette and press Control-J (or Command-J) to copy the selected contents to a new layer. Then drag the Background layer onto the Trash icon at the bottom right of the Layers palette. Use the Lasso tool to draw a closed selection around the large cluster of objects at the left.



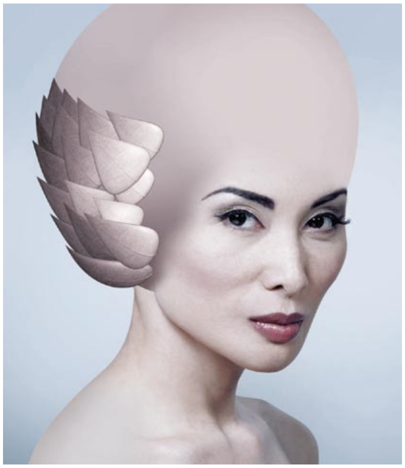


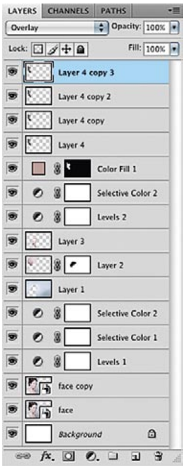
Luminosity Opacity: 40%

Lock: Fill: 100%

LAYERS
CHANNELS
PATHS
Layer 4
Selective Color 2
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background

60 Use the Move tool to click inside the selected area and drag the contents of the selection into your working file as a new layer. Drag your new layer to the top of the stack if it isn't already there in the Layers palette. Press Control-T (or Command-T) to activate the Free Transform operation. When the bounding box surrounds your layer contents, Shift-drag a corner point to adjust the size proportionately and move it into place over the back of her head. When you're happy with the placement, change the blending mode of the layer to luminosity and reduce the opacity to 40%. Control-click (or Command-click) the Layer thumbnail to load a selection from the contents of the layer.



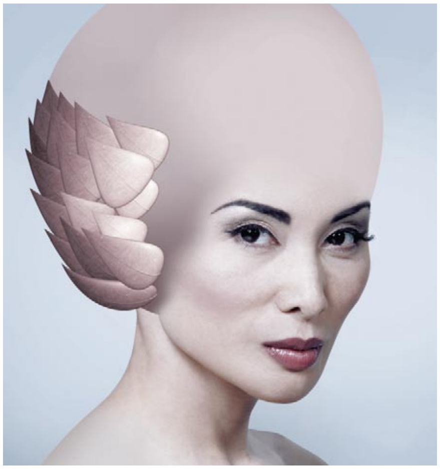


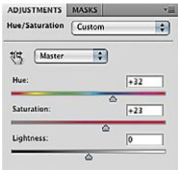
Overlay Opacity: 100%

Lock: Fill: 100%

LAYERS
CHANNELS
PATHS
Layer 4 copy 3
Layer 4 copy 2
Layer 4 copy
Layer 4
Color Fill 1
Selective Color 2
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background

61 While the selection is active, choose the Solid Color option from the list in the Create New Fill or Adjustment Layer menu at the bottom of the Layers palette. When the picker appears, choose a region of slightly darker flesh by clicking it in the image window. Click OK to close the picker, then drag the layer beneath the underlying layer in the Layers palette so that you can see your objects once again. Duplicate the top layer by dragging it onto the Create A New Layer button at the bottom of the Layers palette. Change the blending mode of the duplicate layer to Hard light and reduce the opacity to 11%. Now duplicate this newly copied layer and change its blending mode to Overlay. Increase the opacity of this layer to 100%. After increasing the opacity of the layer, duplicate it one more time, but leave the opacity and blending mode alone afterward.




ADJUSTMENTS
MASKS

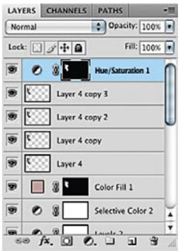
Hue/Saturation: Custom

Master

Hue: +32

Saturation: +23

Lightness: 0


LAYERS
CHANNELS
PATHS
Hue/Saturation 1
Layer 4 copy 3
Layer 4 copy 2
Layer 4 copy
Layer 4
Color Fill 1
Selective Color 2

Normal

Opacity: 100%

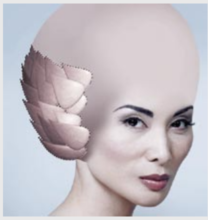
Lock:

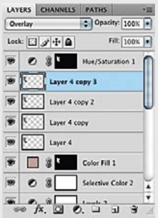
Fill: 100%

62 Control-click (or Command-click) the current layer's thumbnail to load a selection from the contents. While the selection is active, choose the Hue/Saturation option from the list within the Create New Fill or Adjustment Layer menu at the bottom of the Layers palette. In the Adjustments palette, adjust the hue and saturation sliders to enhance the pinkish hue and increase the saturation. Depending on the color of your underlying solid color layer, your hue and saturation adjustment values may vary slightly from these.

Brighter highlights

Use a channel-based selection to enhance lighter regions of the underlying object.




LAYERS
CHANNELS
PATHS
Hue/Saturation 1
Layer 4 copy 3
Layer 4 copy 2
Layer 4 copy
Layer 4
Color Fill 1
Selective Color 2

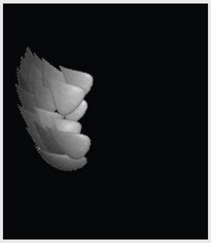
Overlay

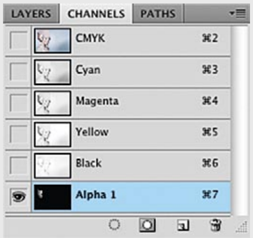
Opacity: 100%

Lock:

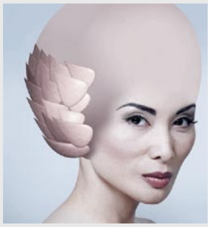
Fill: 100%

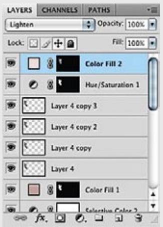
1 Target any of the layers beneath the Hue/Saturation adjustment layer in the Layers palette that contains your rendered object. Press Control-A (or Command-A) to select all. Press Control-C (or Command-C) to copy, and then Control-click (or Command-click) the targeted layer's thumbnail to generate a selection from its contents.




LAYERS
CHANNELS
PATHS
CMYK ⌘2
Cyan ⌘3
Magenta ⌘4
Yellow ⌘5
Black ⌘6
Alpha 1 ⌘7

2 While the selection is active, click the Create New Channel button at the bottom of the Channels palette. Target your new channel in the Channels palette and then press Control-V (or Command-V) to paste the copied layer contents into the active selection within the new alpha channel.




LAYERS
CHANNELS
PATHS
Color Fill 2
Hue/Saturation 1
Layer 4 copy 3
Layer 4 copy 2
Layer 4 copy
Layer 4
Color Fill 1

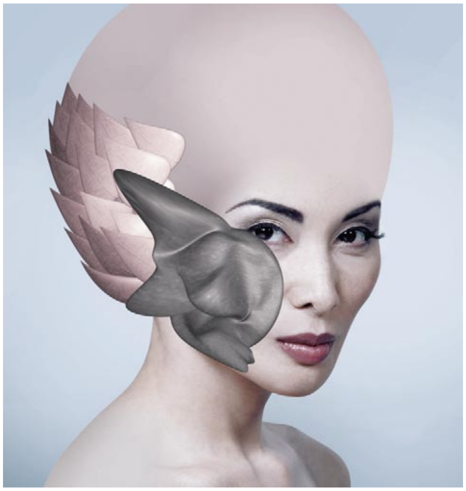
Lighten

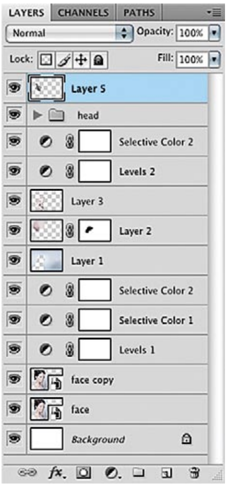
Opacity: 100%

Lock:

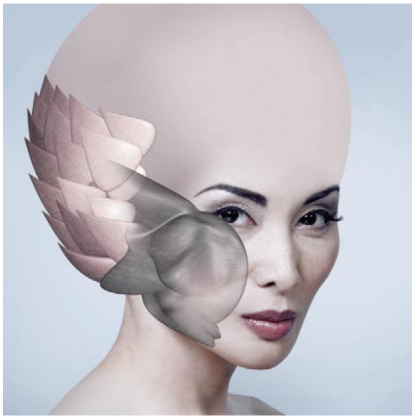
Fill: 100%

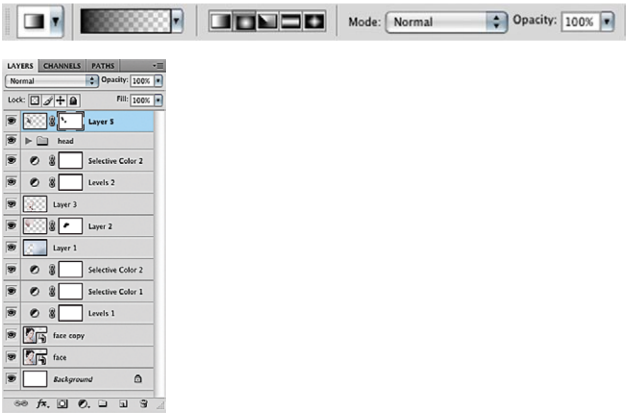
3 Load a selection from the contents of the channel by Control-clicking (or Command-clicking) the channel's thumbnail. Return to the Layers palette and, while the current selection is active, create a new solid color layer. When the picker appears, specify a light pink color and click OK. After that, drag the solid color layer to the top of the stack in the Layers palette.



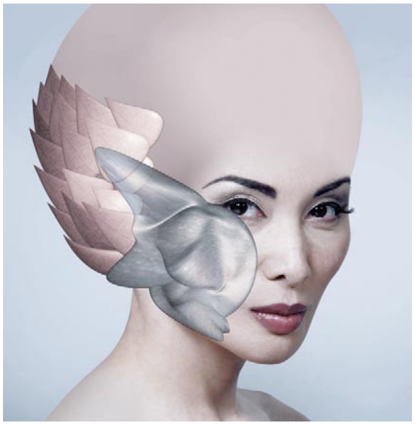

LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 5
head
Selective Color 2
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background

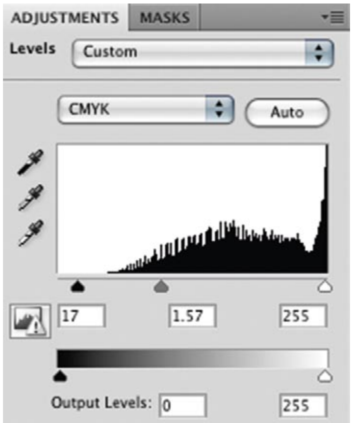
63 At this moment, you should have your top layer targeted in the Layers palette. Hold down the Shift key and then click the darker pink solid color layer you created earlier. This will select both solid color layers as well as all layers in between. Press Control-G (or Command-G) to group them. Double-click the name of the group in the Layers palette to highlight it and then change the name of the group to head. Open the *rendering2.tif* file. As you did before, load a selection from the included alpha channel. Then simply use the Move tool to click the selected image component and drag it into your working file as a new layer. Use Free Transform to adjust the size and position it over her cheek area.




Mode: Normal
Opacity: 100%
LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 5
head
Selective Color 2
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background

64 Click the Add Layer Mask button at the bottom of the Layers palette to mask the layer. Target the mask in the Layers palette and select the Gradient tool from the Toolbar. Specify a black foreground color and then choose the Foreground to Transparent gradient preset from the preset picker in the Tool Options bar. Select the Radial method in the Tool Options bar and then carefully create a few small, black-to-transparent, radial gradients within the mask to gently fade certain regions of the layer contents.





ADJUSTMENTS MASKS

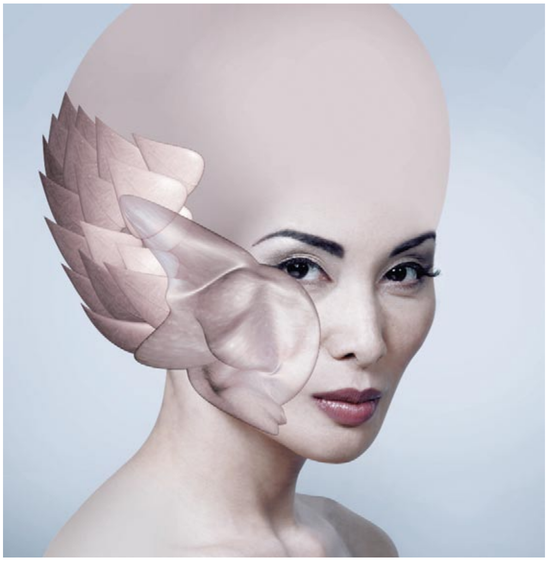
Levels: Custom

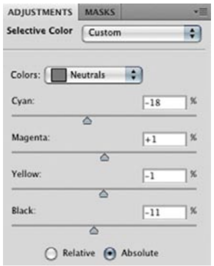
CMYK Auto

17 1.57 255

Output Levels: 0 255

65 Duplicate the current layer and change the blending mode to Hard light. Right-click (or Control-click) the layer's Mask thumbnail in the Layers palette. When the pop-up menu appears, choose the Delete Layer Mask option to remove the mask from this layer. Control-click (or Command-click) the Layer thumbnail to load a selection from the contents, then choose Levels from the list of options in the Create New Fill or Adjustment Layer menu at the bottom of the Layers palette. Adjust the input level sliders in the Adjustments palette, similar to what is shown here, to lighten the midtones and deepen the shadows.





ADJUSTMENTS MASKS

Selective Color: Custom

Colors: Neutrals

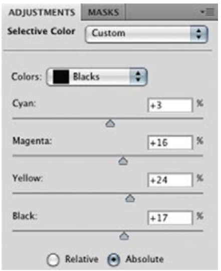
Cyan: -18 %

Magenta: +1 %

Yellow: -1 %

Black: -11 %

○ Relative ● Absolute



ADJUSTMENTS MASKS

Selective Color: Custom

Colors: Blacks

Cyan: +3 %

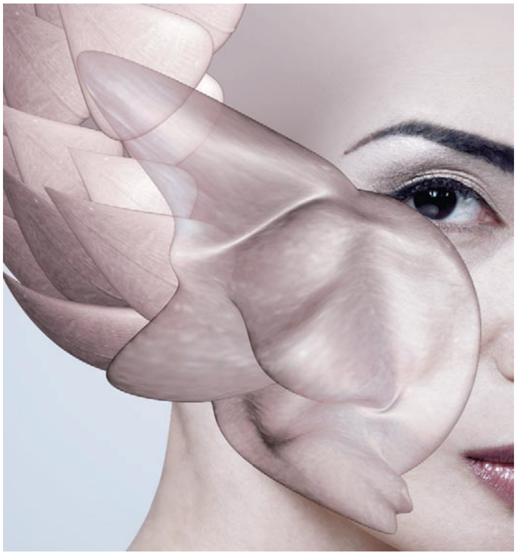
Magenta: +16 %

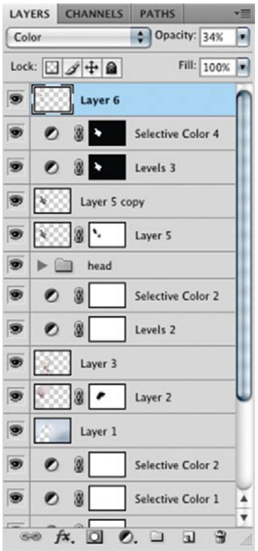
Yellow: +24 %

Black: +17 %

○ Relative ● Absolute

66 Control-click (or Command-click) the Levels adjustment layer mask thumbnail to load a selection from it. While the selection is active, create a new Selective Color layer, as you've done previously. This will create a Selective color layer that is masked by the active selection. In the Adjustments palette, select Neutrals from the list of colors and then edit the CMYK sliders, removing mainly cyan and black by about 10% or so. Then, select Blacks from the list of colors and increase the magenta, yellow, and black somewhat evenly. Then increase the amount of cyan slightly.

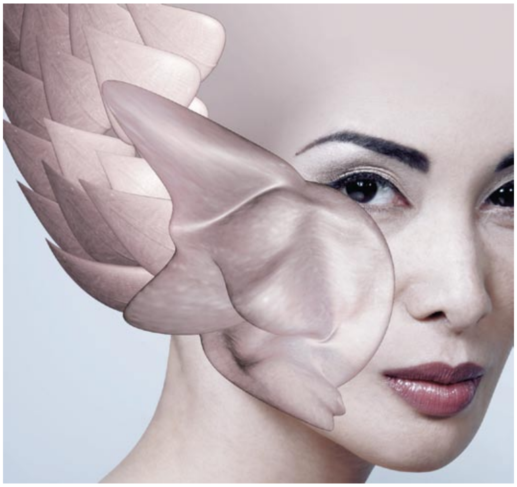


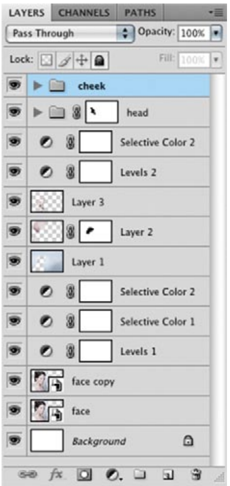


Color
Opacity: 34%
Fill: 100%

Layer 6
Selective Color 4
Levels 3
Layer 5 copy
Layer 5
head
Selective Color 2
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1

67 Now load a selection from the Selective Color layer's mask. While the selection is active, create a new layer and ensure that it is targeted. Change the blending mode of the layer to Color and select the Gradient tool. Right now you want to introduce some Foreground to Transparent, Radial gradients into areas of the selection that could use some more pink in them. Sample areas of her skin and then click and drag over the necessary regions. You don't want the result to be too drastic, however, so try reducing the opacity of the layer after the fact to something rather low. Yours will likely differ slightly, but the opacity setting I settled on was 34%. Ensure that you keep this selection active.

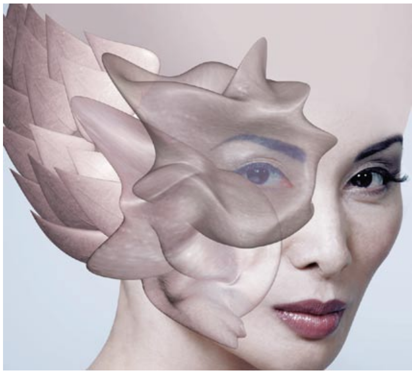


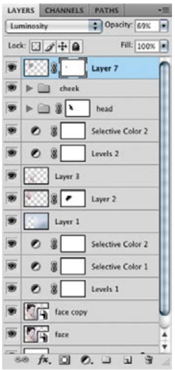


Pass Through
Opacity: 100%
Fill: 100%

cheek
head
Selective Color 2
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background

68 While the selection is active, target the head group beneath your current series of layers in the Layers palette. Choose Layer > Layer Mask > Reveal All from the menu. Target the new layer mask and create some Black to Transparent, Radial gradients within the selection to hide regions that are visible through the above layers. Press Control-D (or Command-D) to deactivate the selection. Next, target all the layers above the current group and group them as well. Name the new group cheek.

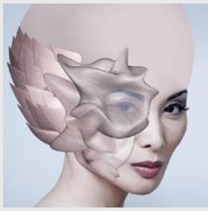


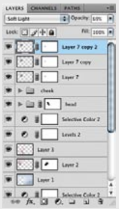

LAYERS
CHANNELS
PATHS
Luminosity
Opacity: 69%
Lock:
Fill: 100%
Layer 7
cheek
head
Selective Color 2
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face

69 Open the *rendering1.tif* file. Load a selection from the alpha channel in the file and then use the Move tool to drag the selected contents of the rendered image into your working file as a new layer. Again, use Free Transform to adjust the size and positioning. Feel free to Rotate as well if necessary. When you've carefully positioned the rendered object over her eye at the left of the image, press the Enter key to apply the transformation. Add a mask to the layer and use the Gradient tool to create a small Black to Transparent gradient within the mask to hide the area at the lower left where the object overlaps the one below. Change the blending mode of the layer to Luminosity and reduce the opacity to 69%.

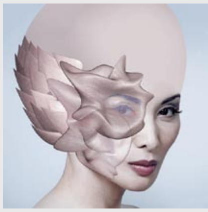
Altering the rendered object

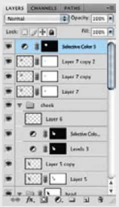
Use a duplicate alongside an adjustment and fill layer to make the object look as though it belongs on her face.



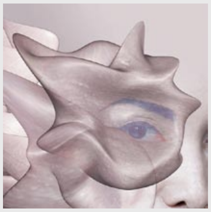

LAYERS
CHANNELS
PATHS
Soft Light
Opacity: 69%
Fill: 100%
Layer 7 copy 2
Layer 7 copy
Layer 7
cheek
head
Selective Color 2
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2

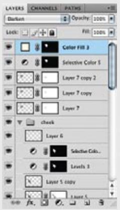
1 Duplicate the layer and change the blending mode of the duplicate layer to Soft light. Then duplicate this newly duplicated layer as well so that there are two duplicate layers.



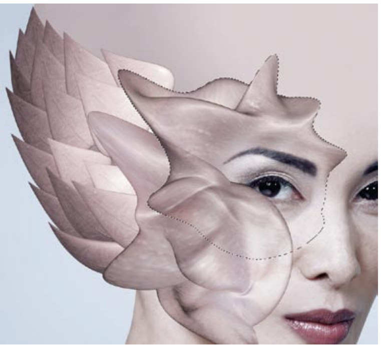

LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Fill: 100%
Selective Color 5
Layer 7 copy 2
Layer 7 copy
Layer 7
cheek
Layer 6
Selective Colo...
Levels 3
Layer 5 copy
Layer 5
head

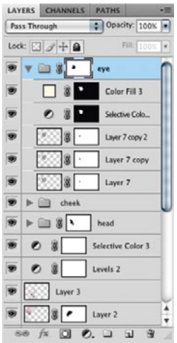
2 Control-click (or Command-click) the Layer thumbnail (not the mask) to load a selection from the layer's contents. With the selection active, create a new Selective Color layer. In the Adjustments palette, slightly increase the amount of yellow and magenta while decreasing the amount of cyan in the Neutrals.




LAYERS
CHANNELS
PATHS
Darken
Opacity: 100%
Fill: 100%
Color Fill 3
Selective Color 5
Layer 7 copy 2
Layer 7 copy
Layer 7
cheek
Layer 6
Selective Colo...
Levels 3
Layer 5 copy
Layer 5

3 Control-click (or Command-click) the layer's mask to load it as a selection and then create a new solid color layer. Select a light yellow color from the picker and click OK. Change the blending mode for this solid color layer to Darken so that it only affects the underlying highlights.



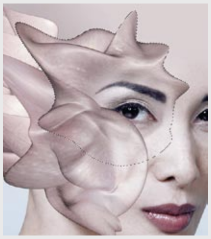


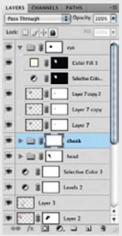
LAYERS
CHANNELS
PATHS
Pass Through
Opacity: 100%
Lock:
Fill: 100%
eye
Color Fill 3
Selective Colo...
Layer 7 copy 2
Layer 7 copy
Layer 7
cheek
head
Selective Color 3
Levels 2
Layer 3
Layer 2

70 Target all the layers and adjustment layers that sit above the cheek group in the Layers palette and group them. Change the name of the group to eye. Add a mask to the group and then use the Gradient tool to create some Radial, Black to Transparent gradients in the mask to hide the regions of the group in areas that overlap her eye. Next, expand the group and Control-click (or Command-click) any Layer thumbnail or Adjustment Layer mask thumbnail to generate a selection around the perimeter of the shape.

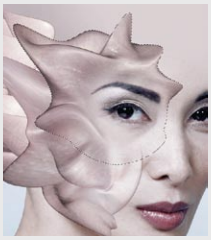
Blending the cheek object

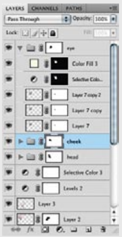
Use a tried-and-true method to carefully blend the cheek object into her face.



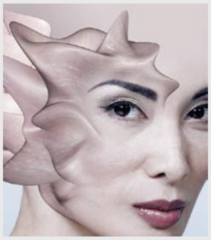


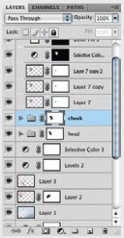
1 While the selection is active, target the cheek group in the Layers palette and then choose Layer > Layer Mask > Reveal All from the menu. Select the Gradient tool and set the foreground color to black.



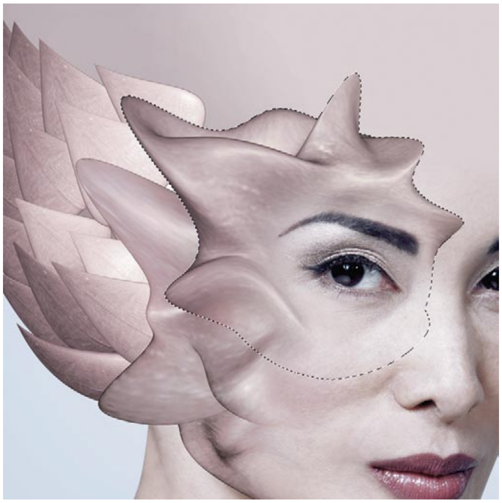


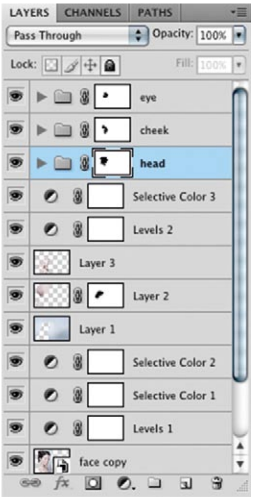
2 Use the Radial method to create some Foreground to Transparent gradients within the selection on the currently targeted layer's mask. Create some gradients that cover the top edge of the cheek group, yet be careful to not totally obscure the detail at the lower left in the selection.





3 Next, deactivate the selection and then create some gradients in the area where the object overlaps her face at the right. You really want to gently mask out the hard edge here as well as blend the lower portion into her jaw.





LAYERS CHANNELS PATHS

Pass Through Opacity: 100%

Lock: Fill: 100%

eye

cheek

head

Selective Color 3

Levels 2

Layer 3

Layer 2

Layer 1

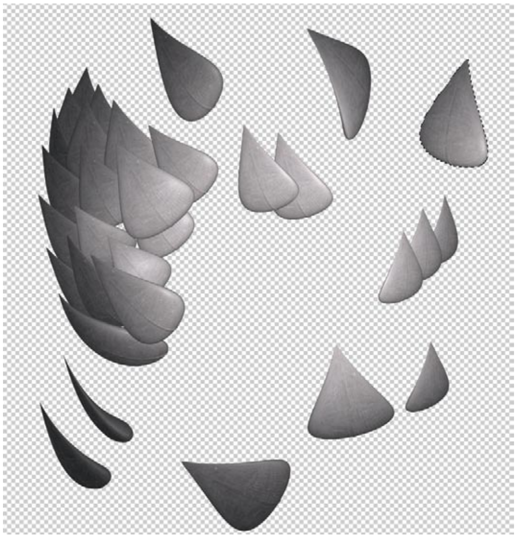
Selective Color 2

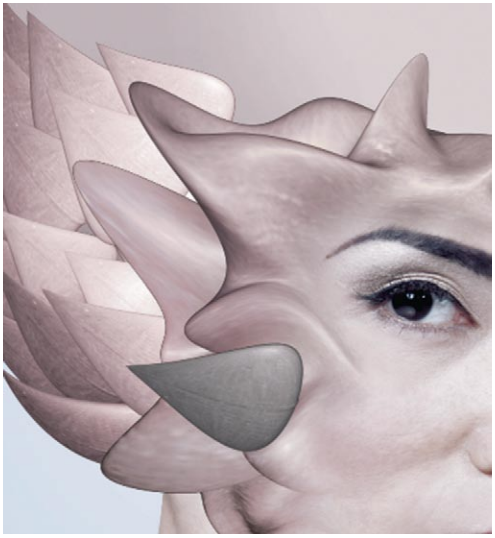
Selective Color 1

Levels 1

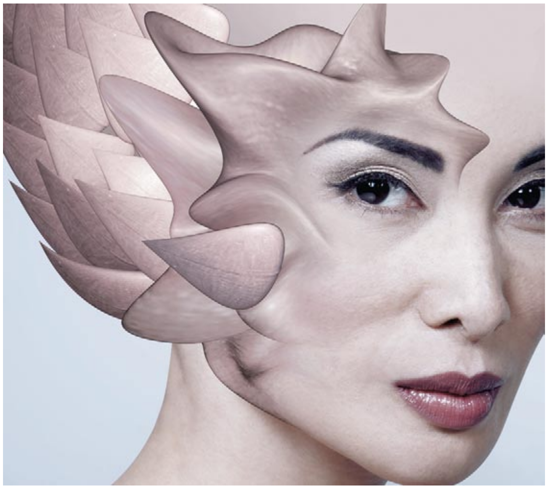
face copy

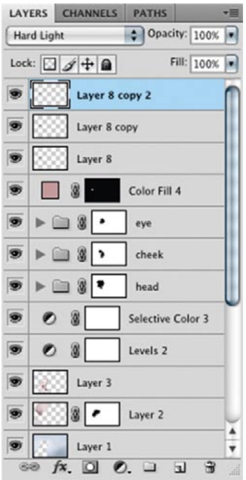
71 Return to one of the layers within your eye group and load a selection from the contents again by Control-clicking (or Command-clicking) it. While the selection is active, target the head group's mask in the Layers palette. Set the current foreground color to black, if it isn't already, and then press Alt-Delete (or Option-Delete) on the keyboard to fill the active selection with black within the currently targeted mask. This will hide the overlap in the upper-left region of the eye shape.





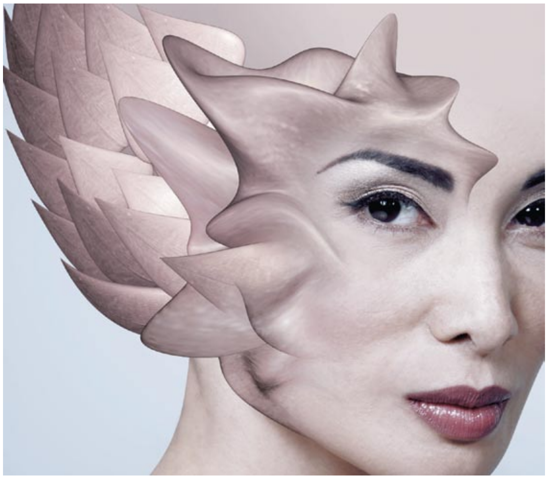
72 Deactivate the current selection and return to the open *rendering4.tif* file. Use the Lasso to draw a selection around a single object. Now you can see why we scattered some duplicate objects around. Although we won't use them all, the advantage is that there are plenty of options to choose from. Use the Lasso to draw a selection around the piece at the upper right. After creating a closed selection around it, choose Edit > Transform > Flip Horizontal from the menu. After flipping it, use the Move tool to drag the selected contents into the working file as a new layer. Drag this layer to the top of the stack if it isn't there already. Use Free Transform to adjust the size and rotation as well as position it just to the left of her cheek area.

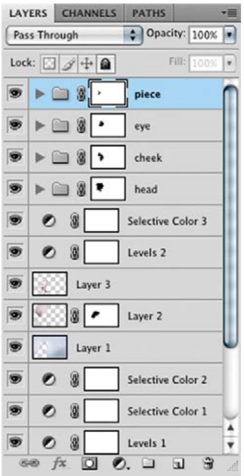




Hard Light
Opacity: 100%
Lock:
Fill: 100%
Layer 8 copy 2
Layer 8 copy
Layer 8
Color Fill 4
eye
cheek
head
Selective Color 3
Levels 2
Layer 3
Layer 2
Layer 1

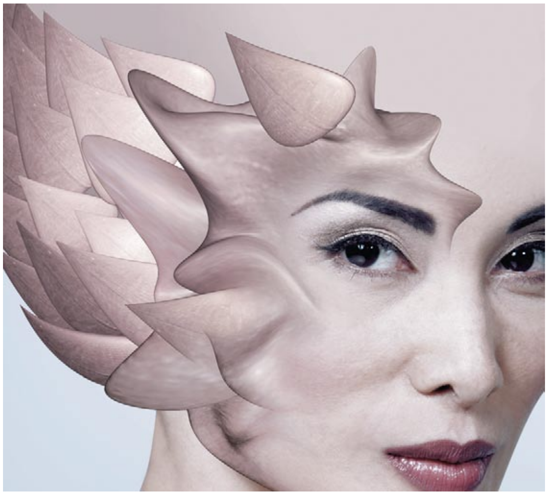
73 Change the blending mode of the layer to Luminosity. Control-click (or Command-click) the layer's thumbnail to load a selection from the contents. While the selection is active, create a new solid color layer. While the picker is open, run the Eyedropper over a medium-pink region and click to sample it. Click OK and then drag the solid color layer beneath the previous layer in the Layers palette. Now duplicate the top layer and change the blending mode of the layer to Screen. Reduce the opacity of the layer to 53%. Duplicate this layer as well, then change the blending mode to Hard light and increase the opacity to 100%.

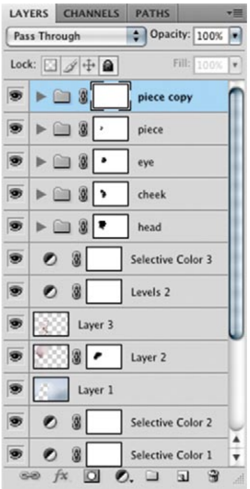




Pass Through
Opacity: 100%
Lock:
Fill: 100%
piece
eye
cheek
head
Selective Color 3
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1

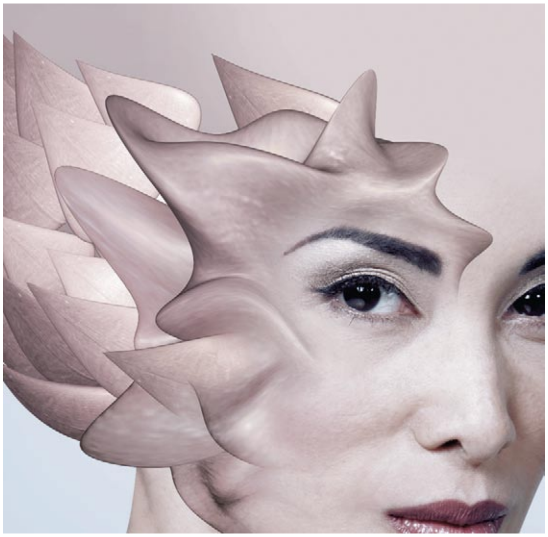
74 Again, Control-click (or Command-click) the layer's thumbnail to load a selection from the contents. While the selection is active, create a new Hue/Saturation adjustment layer. In the Adjustments palette, adjust the Hue to +37, decrease the Saturation by 16, and increase the Lightness by 10. Target all these layers and group them. Rename the group piece. Add a mask to the group and then use the Gradient tool to create some small, Radial, Black to Transparent gradients in the mask. Create the gradients in the region where the right side of the shape overlaps the cheek details to blend it in nicely.

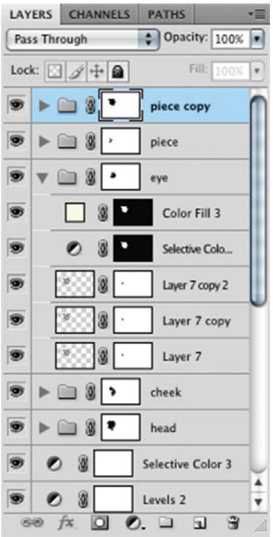



LAYERS
CHANNELS
PATHS
Lock:
Fill: 100%
piece copy
piece
eye
cheek
head
Selective Color 3
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1

Pass Through Opacity: 100%

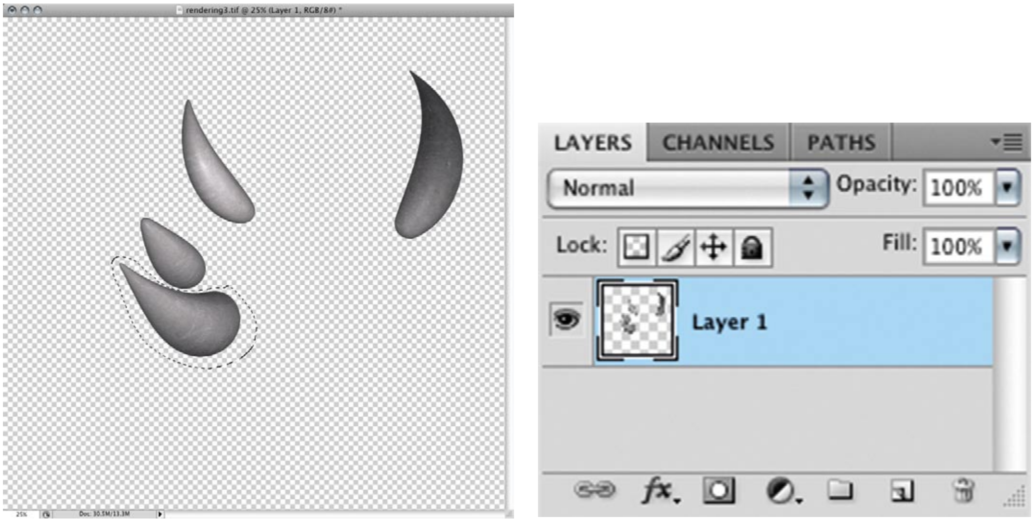
75 Duplicate the group by dragging it onto the Create A New Layer button at the bottom of the Layers palette. With the duplicate group targeted (not the mask), press Control-T (or Command-T) to enter Free Transform. When the bounding box appears, click and drag outside it to rotate the group. Then click and drag inside the box to reposition the contents of the group so that it is overlapping the top of the object that surrounds her eye. Target the Layer mask and set the foreground color to White, if it isn't already. Then press Alt-Delete (or Option-Delete) to fill the mask with white, revealing the entire group.



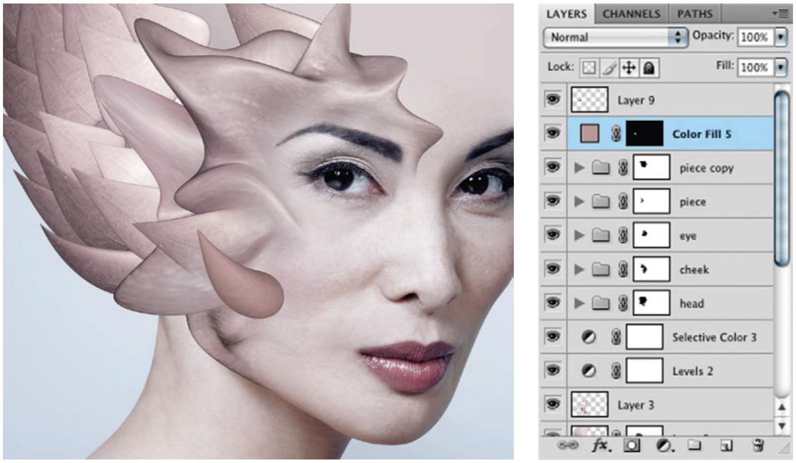

LAYERS
CHANNELS
PATHS
Lock:
Fill: 100%
piece copy
piece
eye
Color Fill 3
Selective Colo...
Layer 7 copy 2
Layer 7 copy
Layer 7
cheek
head
Selective Color 3
Levels 2

Pass Through Opacity: 100%

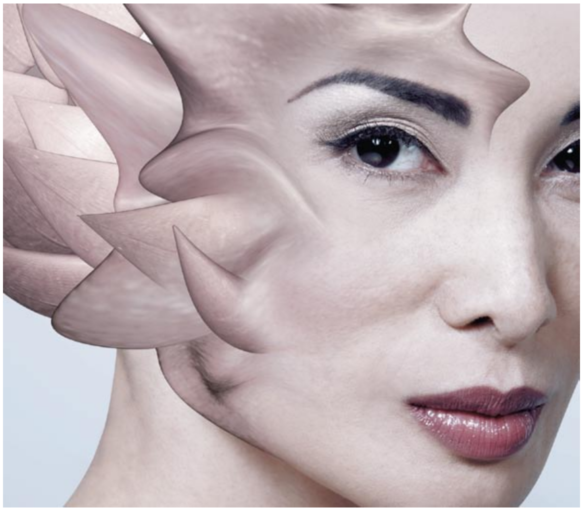
76 Expand the Eye group in the Layers palette and then Control-click (or Command-click) one of the layers to generate a selection that outlines the shape. With the selection active, target the mask of your Piece Copy group in the Layers palette. The background color should be set to Black. If it is not, press the x key until it is. Then press Control-Delete (or Command-Delete) to fill the active selection with black within the currently targeted mask, hiding the contents of the group in this area. Deactivate the selection.

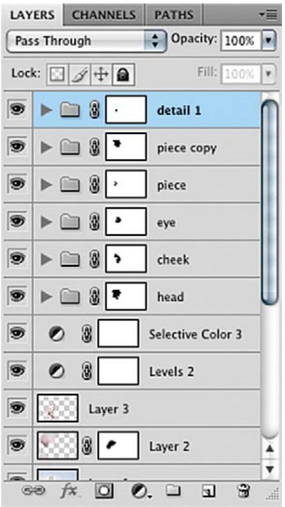

rendering3.tif @ 25% (Layer 1, RGB/8#) *
25%
Doc: 30.3M/13.3M
LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 1

77 Open the *rendering3.tif* file. Load a selection from the alpha channel contained within the file. While the selection is active, return to the Layers palette and press Control-J (or Command-J) to copy the selected contents to a new layer. Drag the background layer onto the Trash icon at the bottom of the Layers palette to delete it. Use the Lasso tool to draw a closed selection around only the large shape at the bottom left. You might need to zoom in close to do this. Be careful not to include any portions of the other shapes.


LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 9
Color Fill 5
piece copy
piece
eye
cheek
head
Selective Color 3
Levels 2
Layer 3

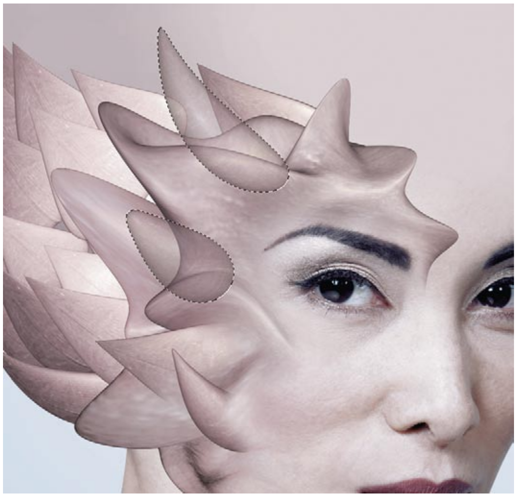
78 Use the Move tool to drag the selected contents into your working file as a new layer. As before, use Free Transform to position, resize, and rotate the contents of the selection as required. Position it near the lower left of her cheek in the image window. Change the blending mode of the layer to Luminosity and reduce the opacity to 52%. Control-click (or Command-click) the Layer thumbnail to load a selection from the contents of the layer. While the selection is active, create a new solid color layer. When the picker opens, move the mouse over a pink region of the image and click to sample that color. Click OK and then drag the new solid color layer beneath the Object layer in the Layers palette.

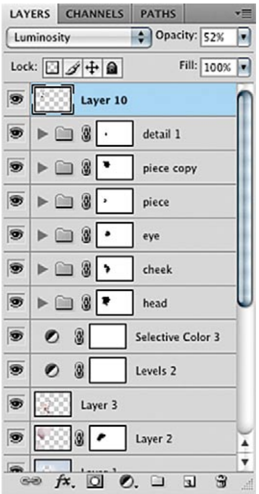




Pass Through
Opacity: 100%
Lock:
Fill: 100%
detail 1
piece copy
piece
eye
cheek
head
Selective Color 3
Levels 2
Layer 3
Layer 2

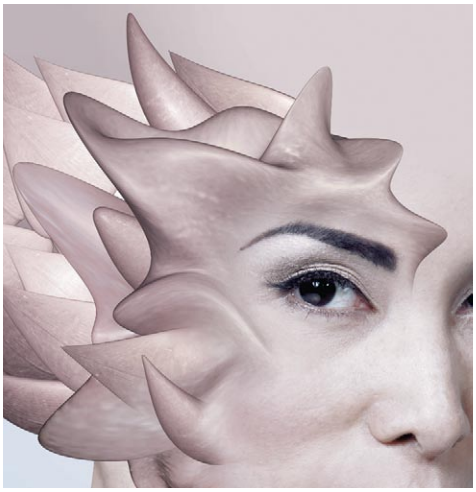
79 Target the top layer and duplicate it. Change the blending mode of the duplicate layer to Overlay and increase the opacity to 100%. While this layer is targeted, hold down the Shift key and click the solid color layer you just created. This will select all three layers that make up this object. When the three layers are selected, press Control-G (or Command-G) to group them. Name the group detail 1. Add a mask to the group and select the Gradient tool. Select a black foreground color and then introduce some Radial, Black to Transparent gradients into the mask to fade the right side of the grouped object into the background.

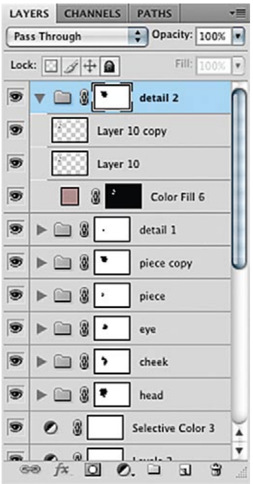




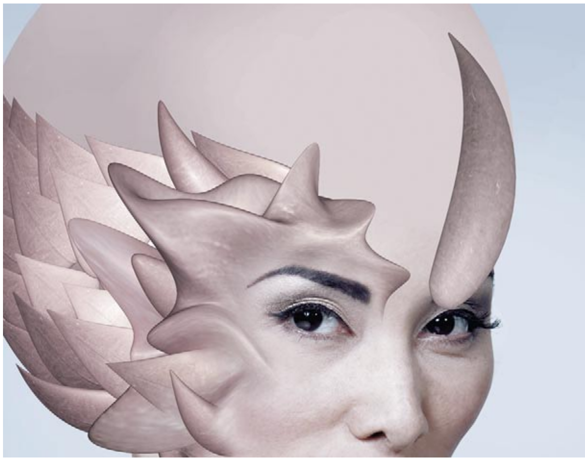
Luminosity
Opacity: 52%
Lock:
Fill: 100%
Layer 10
detail 1
piece copy
piece
eye
cheek
head
Selective Color 3
Levels 2
Layer 3
Layer 2

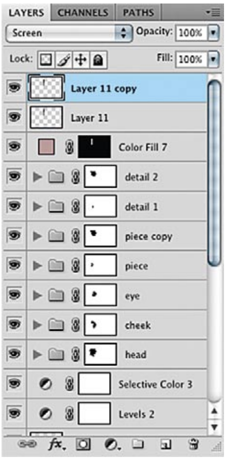
80 Return to the open *rendering3.tif* file. Use the Lasso to draw a selection around the two objects directly above the object you selected previously. Next, use the Move tool to drag the selected contents into your working file as a new layer. Ensure that your new layer is at the top of the stack in the Layers palette and then use Free Transform to adjust size and rotation and to position the objects similarly to what is shown here. Change the blending mode of the layer to Luminosity and reduce the opacity to 52%. Control-click (or Command-click) the Layer thumbnail to load a selection from the contents.



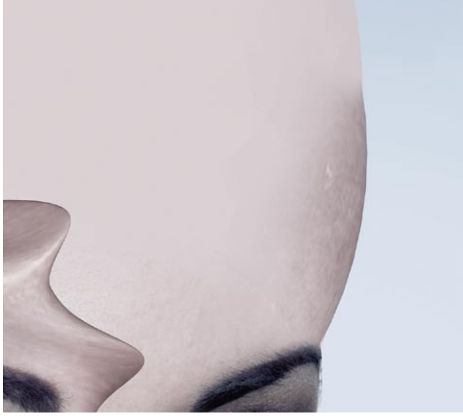

LAYERS
CHANNELS
PATHS
Pass Through
Opacity: 100%
Lock:
Fill: 100%
detail 2
Layer 10 copy
Layer 10
Color Fill 6
detail 1
piece copy
piece
eye
cheek
head
Selective Color 3

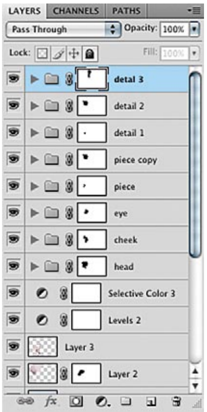
81 While the selection is active, create a new solid color layer with a pink fill color, as you've done previously numerous times. Then drag the solid color layer beneath the layer that contains the rendered objects in the Layers palette. Duplicate your top layer, then change the blending mode of the duplicate layer to Overlay and increase the opacity to 100%. Target these three layers and then press Control-G (or Command-G) to group them. Change the name of the group to detail 2. Control-click (or Command-click) the Piece Copy group's layer mask to load it as a selection. While the selection is active, ensure that you have the new detail 2 group targeted in the Layers palette and then click the Add Layer mask button at the bottom of the palette.




LAYERS
CHANNELS
PATHS
Screen
Opacity: 100%
Lock:
Fill: 100%
Layer 11 copy
Layer 11
Color Fill 7
detail 2
detail 1
piece copy
piece
eye
cheek
head
Selective Color 3
Levels 2

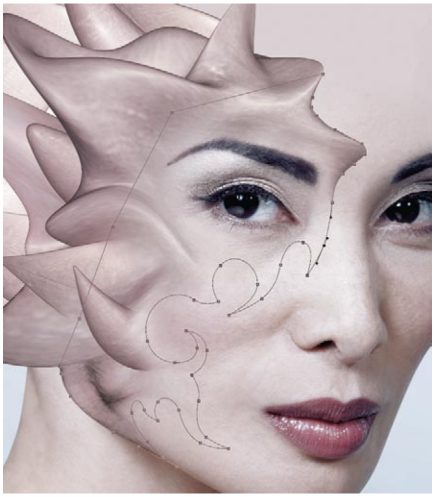
82 Now, return to the *rendering3.tif* file and use the Lasso tool to draw a selection around the object at the upper right. Drag it into your working file as a new layer and change the blending mode to Luminosity. Use Free Transform to increase the vertical size as well as rotate and position the object at the edge of her forehead. Create a selection from the contents of the layer by Control-clicking (or Command-clicking) the thumbnail in the Layers palette. Then as you've done numerous times already, create a solid color layer with a pink fill and drag it beneath the layer with the rendered object on it. After that, duplicate the top layer that contains the rendered object and change the blending mode of the duplicate layer to Screen.

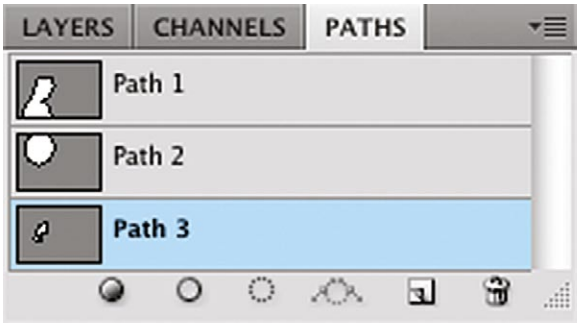



LAYERS
CHANNELS
PATHS
Pass Through
Opacity: 100%
Lock:
Fill: 100%
detail 3
detail 2
detail 1
piece copy
piece
eye
cheek
head
Selective Color 3
Levels 2
Layer 3
Layer 2

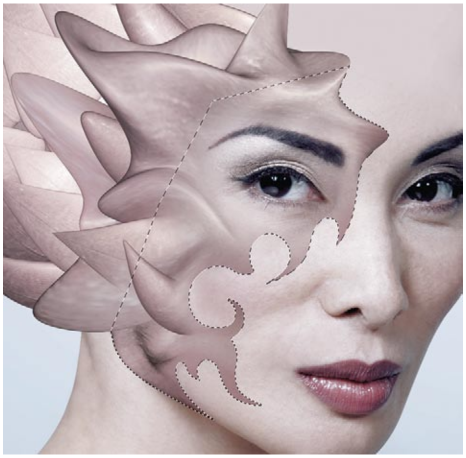
83 Target these three new layers and group them. Name the group detail 3 and add a mask to the group. Target the mask and then create some Radial, Black to Transparent gradients within the mask to blend the top, left, and bottom of the edges into the underlying layers so that it looks like it belongs at the right edge of her forehead. Take your time and create numerous small gradients along the left side to blend it without hiding too much of the content at the right.

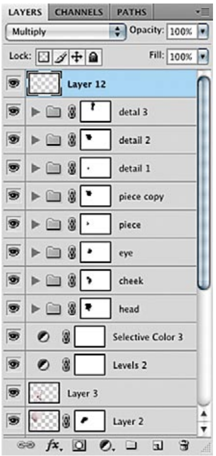
PART NINE: Adding tribal designs




LAYERS
CHANNELS
PATHS
Path 1
Path 2
Path 3

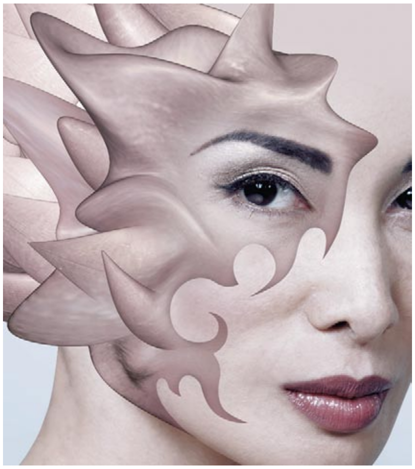
84 Select the Pen tool and ensure that it is set to create Paths in the Tool Options bar. Now take your time and carefully draw a nice tribal design that will represent the right edge of the piece overlapping her eye. Start drawing in the brow area and work your way down, creating a nice design beside her nose, onto her cheek, and finally tracing the line of her jaw. Work your way back along her jawline until you reach the point where it intersects with a protruding shape. Then you can simply close the path by creating a few points and working your way back to the starting point. The right edge of the path is not important. Really focus on creating interesting detail on the left edge and carefully edit the points and curves with the Direct Selection tool as necessary until you're 100% satisfied with the path.

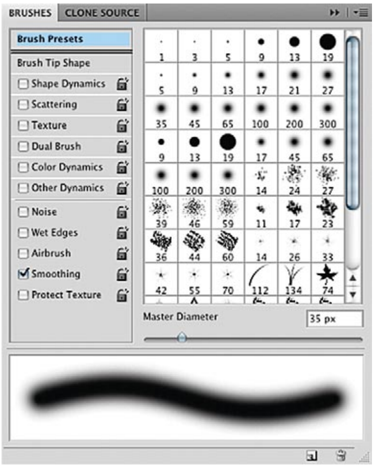



LAYERS
CHANNELS
PATHS
Lock:
Layer 12
detal 3
detail 2
detail 1
piece copy
piece
eye
cheek
head
Selective Color 3
Levels 2
Layer 3
Layer 2

Multiply Opacity: 100% Fill: 100%

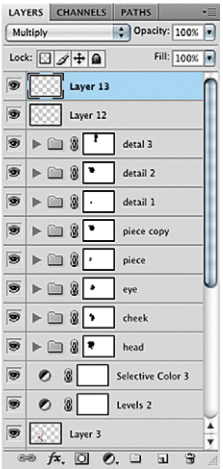
85 Control-click (or Command-click) your new Path thumbnail in the Paths palette to load it as a selection. Return to the Layers palette and create a new layer. Change the blending mode of the new layer to Multiply and select the Gradient tool. As before, ensure that the radial method is specified and the Foreground to Transparent preset is selected in the Tool Options bar. Hold down the Alt (or Option) key and click on a dark pink region to sample the color. Release the Alt (or Option) key and repeatedly click and drag within the selection border along the right edge and bottom to add some gradients in this area, gently darkening it. Feel free to use different colors and to vary the opacity of the Gradient tool as you work.




BRUSHES
CLONE SOURCE
Brush Presets
Brush Tip Shape
Master Diameter

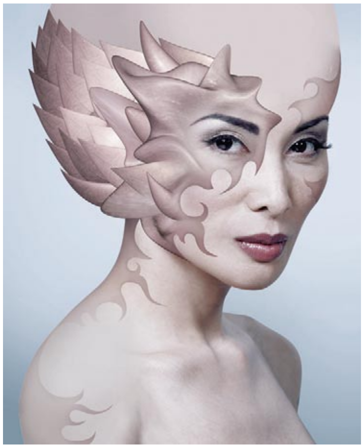
☐ Shape Dynamics
☐ Scattering
☐ Texture
☐ Dual Brush
☐ Color Dynamics
☐ Other Dynamics
☐ Noise
☐ Wet Edges
☐ Airbrush
☑ Smoothing
☐ Protect Texture

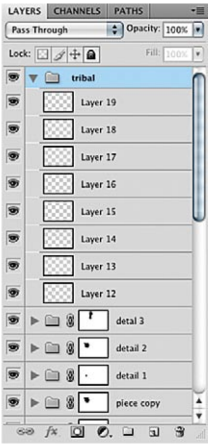
Master Diameter 35 px


LAYERS
CHANNELS
PATHS
Lock:
Layer 13
Layer 12
detal 3
detail 2
detail 1
piece copy
piece
eye
cheek
head
Selective Color 3
Levels 2
Layer 3

Multiply Opacity: 100% Fill: 100%

86 While the current selection remains active, create a new layer and ensure that the new layer is targeted. Change the blending mode of the layer to Multiply and sample a darker color from within the image. Alt-click (or Option-click) a darker purple region over her eye or within her lips. Next, select the Brush tool and make the Brushes palette visible by clicking the Toggle the Brushes Panel button in the Tool Options bar. Choose a soft, round preset and disable any dynamic functions so that the stroke is even. Reduce the opacity of the brush to around 20% and then paint along the edge within the selection in a few select places. This will add a sense of depth to the tribal design. Deactivate the selection.



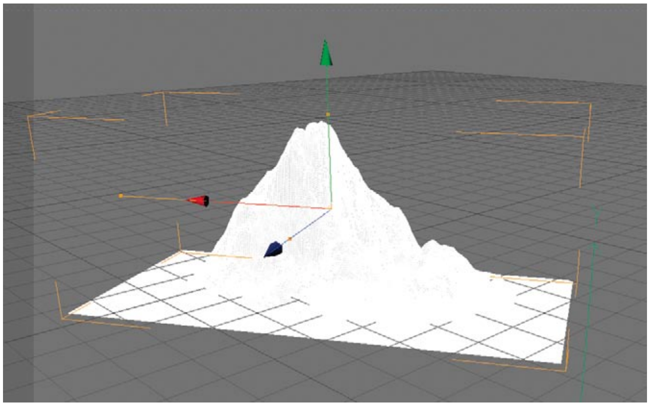


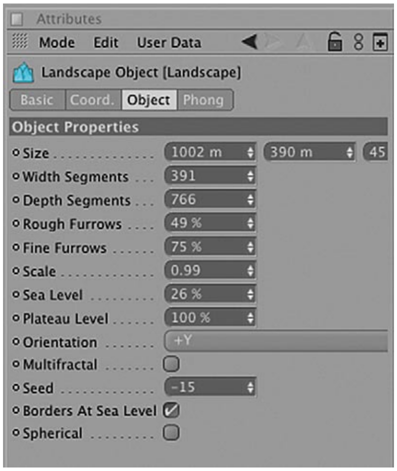
Pass Through
Opacity: 100%

- tribal
  - Layer 19
  - Layer 18
  - Layer 17
  - Layer 16
  - Layer 15
  - Layer 14
  - Layer 13
  - Layer 12
- detal 3
- detail 2
- detail 1
- piece copy

87 Use the Pen tool to draw a path over her other brow area. Use the same procedure to load a selection from, and then add a series of gradients into the selection on a new layer with a Multiply blending mode. While the selection is active, again use the previous method to brush some darker regions into the selection on yet another layer. Repeat the process to add some tribal detail below here eye on her other cheek and also on her neck and shoulder. When you're finished, group all the layers that make up this tribal detail and name the group tribal. Save your file.

PART TEN: Create a mountain range





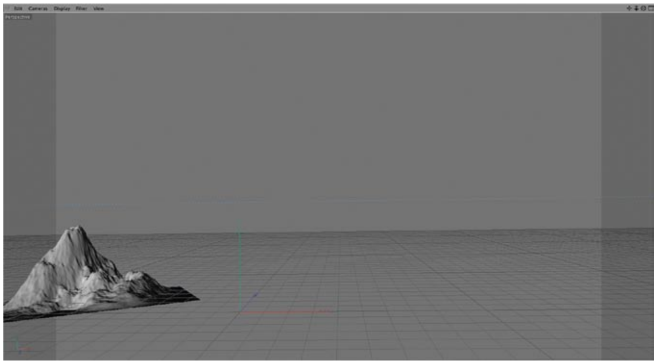
Landscape Object [Landscape]

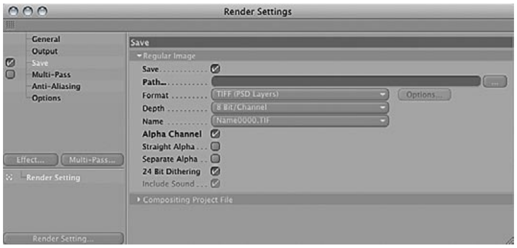
Object Properties

- Size: 1002 m, 390 m, 45
- Width Segments: 391
- Depth Segments: 766
- Rough Furrows: 49 %
- Fine Furrows: 75 %
- Scale: 0.99
- Sea Level: 26 %
- Plateau Level: 100 %
- Orientation: +Y
- Multifractal: ☐
- Seed: -15
- Borders At Sea Level: ☑
- Spherical: ☐

88 Return to Cinema 4D and create a new file. Click and hold the Primitive Objects button in the top Toolbar. When the Primitive Objects palette appears, select the Landscape object. Ensure that the new landscape object is selected in the viewport and then direct your attention to the Attributes Manager. In the Attributes Manager, substantially alter the default attributes of the object. Have some fun experimenting here and considerably altering the Landscape object. Regardless of what you do here, ensure that you add a considerable amount of width and depth segments so that the object appears detailed and smooth when you render it.

89 Now, before we get too involved in creating the mountain range, let's set up the viewport and render settings so we're working to the exact same scale as the working file in Photoshop. Use the navigational icons at the top right of the viewport to rotate the scene, zoom out, and then position things so that the mountain is at the far left. Next, choose Render > Render Settings from the menu. In the Output section, set the width to 18.75 inches and the height to 12 inches. Set the resolution to 72 pixels per inch and then click the Save option at the left. In the Save options, click the … button to the right of the Path option. Name the file mountain and specify a destination for the rendering. Ensure that the Alpha Channel option is enabled and then close the Render Settings.


Edit Cameras Display Filter View
Perspective

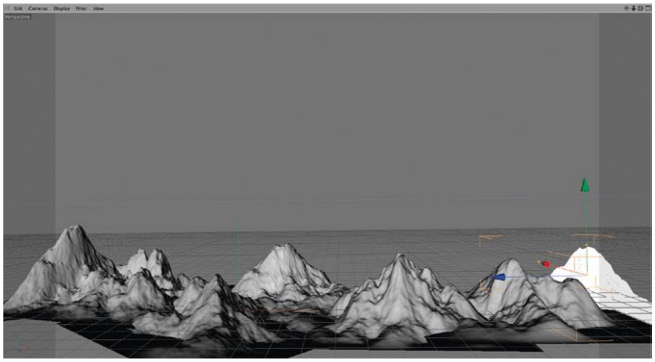

Render Settings
General
Output
Multi-Pass
Anti-Aliasing
Options
Effect...
Multi-Pass...
Render Setting
Render Setting...
Options...
Compositing Project File

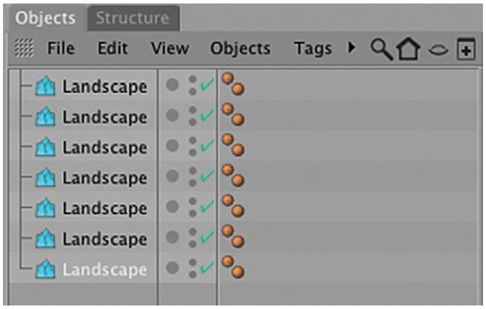
☑ Save

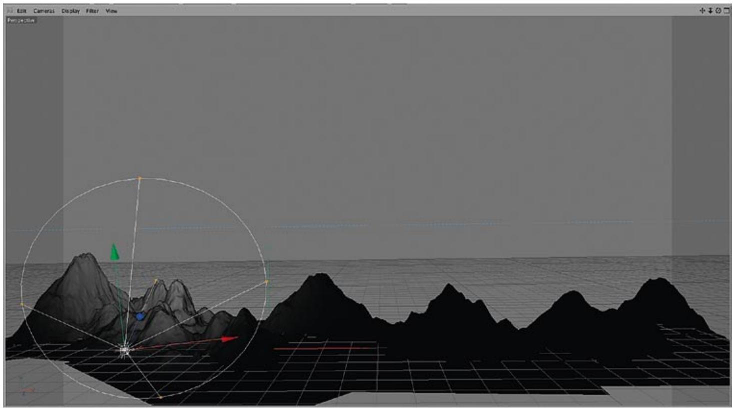
Regular Image

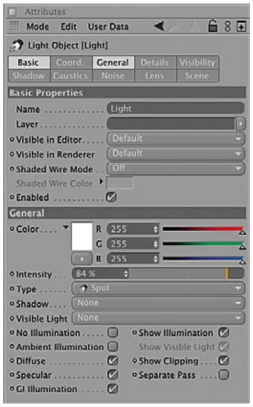
Save ☑
Path… …
Format TIFF (PSD Layers)
Depth 8 Bit/Channel
Name Name0000.TIF
Alpha Channel ☑
Straight Alpha ☐
Separate Alpha ☐
24 Bit Dithering ☑
Include Sound ☑

90 Create another Landscape object and again have some fun editing the object in the Attributes Manager. Try to make it distinctly different from the previous object, yet be certain to ensure that you specify a lot of height and width segments so that the render is smooth and detailed. Use the Move and Rotate tools in the top Toolbar to position the new object next to the previous one within the scene. When you're happy with the result, continue to create more Landscape objects. Edit their individual attributes to make them unique, and position them in the scene so that they are neatly lined up in a row.


Edit Cameras Display Filter View
Perspective


Objects
Structure
File
Edit
View
Objects
Tags
Landscape
Landscape
Landscape
Landscape
Landscape
Landscape
Landscape


Edit Cameras Display Filter View
Perspective


Attributes
Mode Edit User Data
Basic Coord. General Details Visibility
Shadow Caustics Noise Lens Scene

Light Object [Light]

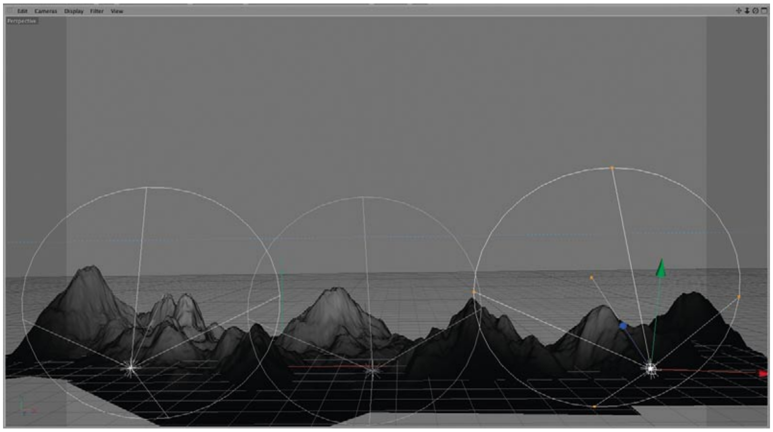
Basic Properties

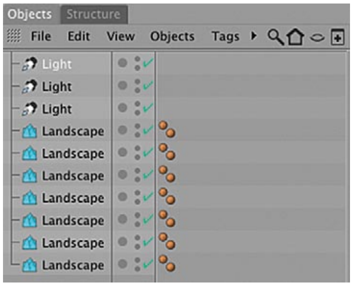
Name: Light
Layer:
Visible in Editor: Default
Visible in Renderer: Default
Shaded Wire Mode: Off
Shaded Wire Color
Enabled: ☑

General

Color: R 255, G 255, B 255
Intensity: 84 %
Type: Spot
Shadow: None
Visible Light: None
No Illumination: ☐
Ambient Illumination: ☐
Diffuse: ☑
Specular: ☑
GI Illumination: ☑
Show Illumination: ☑
Show Visible Light: ☑
Show Clipping: ☑
Separate Pass: ☐

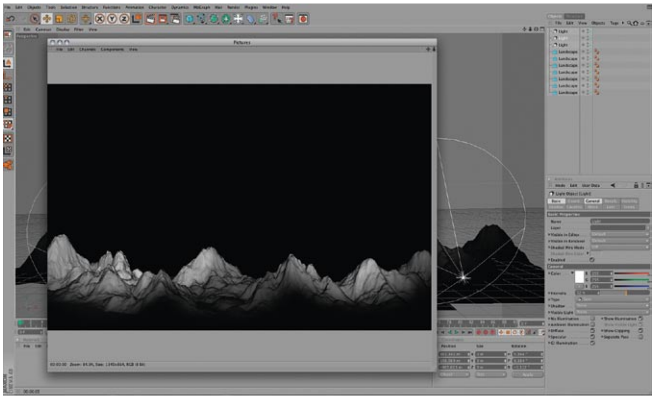
91 Click and hold the Scene Objects button in the top Toolbar. When the Scene Objects palette appears, select the Spotlight object to create a new spotlight within the scene. Use the Move tool to position the light at the left of the scene; then use the Rotate tool to point it at the mountain. Click the navigational icon at the upper right to access a four-up view. Feel free to use any of the available views to position the light exactly where you want it. When you're satisfied, select the Perspective view and then click the same navigational icon to hide the other three views. In the Perspective view, click and drag an orange handle on the circle to adjust the width if necessary. In the Attributes Manager, reduce the intensity to around 84%.


Edit Cameras Display Filter View
Perspective

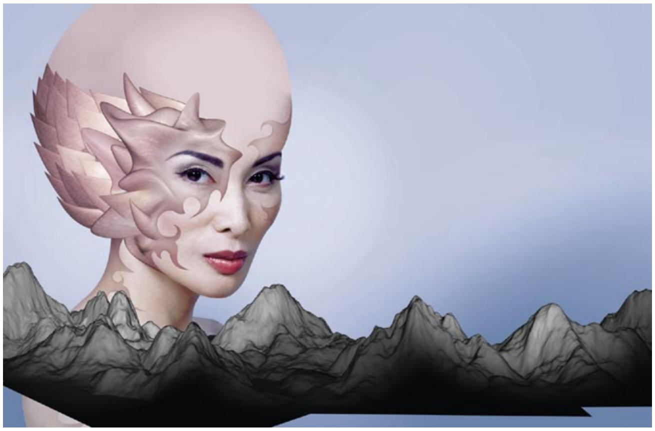

Objects Structure
File Edit View Objects Tags

Light
Light
Light
Landscape
Landscape
Landscape
Landscape
Landscape
Landscape
Landscape

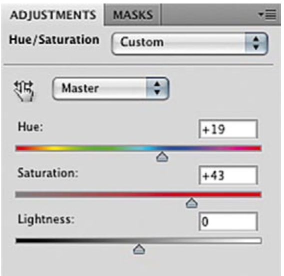
92 In the Object Manager, Control-click (or Control-click)and drag the Light upward to duplicate it. Use the Move tool to drag the duplicate light to the right in the Perspective view so that it illuminates the central portion of the mountain range. Reduce the intensity of this light to around 52%. Now Control-click-drag (or Control-click-drag) this light upward in the Object Manager to duplicate it as well. Use the Move tool to move this newly duplicated light to the right side in the perspective view. Considerably increase the intensity of this light. Select individual lights as necessary and use the Rotate tool to adjust their aim if needed.



93 Click the Render Active View button in the top Toolbar to preview your rendering. This will give you an indication of how your lights are working to illuminate your scene evenly. Bear in mind that the values for intensity I stated earlier were for my file. Depending on the spatial relationship between your lights and the objects, you might need to increase or decrease the intensity of individual lights. When you're satisfied with the illumination, choose Render > Render To Picture Viewer from the menu. After the rendering is complete, close the Picture Viewer and return to your working file in Photoshop.



94 Now create a new Hue/Saturation adjustment layer at the top of the stack in the Layers palette. Open the *mountain.tif* file. In the Adjustments palette, adjust the Hue to +19 and increase the Saturation by 43. In the Channels palette, locate the alpha channel within the file. Control-click (or Command-click) the Alpha Channel thumbnail to load it as a selection. Return to the Layers palette and, while the selection is active, hold down the Shift key as you drag the contents of the selection into your working file with the Move tool. It will be added to the file as a new layer. It is likely that your rendered mountains, like mine, have left some empty spaces beneath the mountain range. To remedy this, ensure that the layer containing the mountains is targeted and then select the Brush tool.


ADJUSTMENTS
MASKS

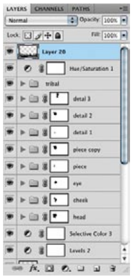
Hue/Saturation: Custom

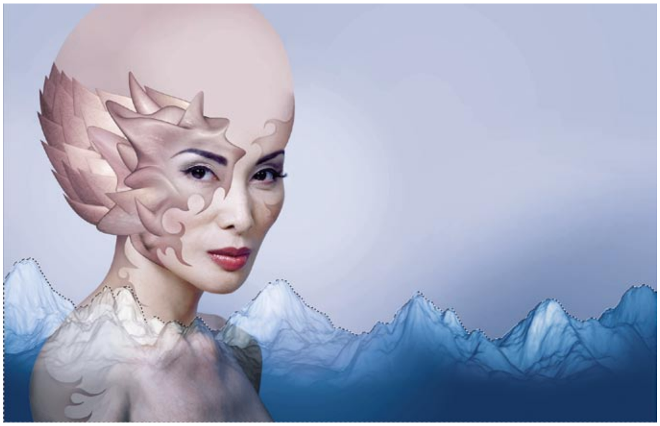
Master

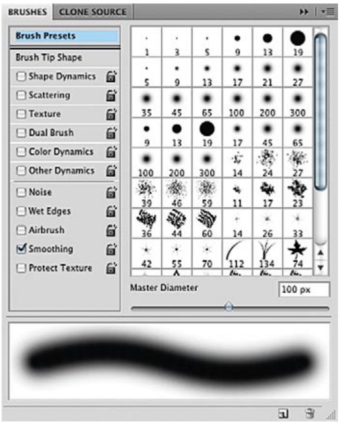
Hue: +19

Saturation: +43

Lightness: 0


LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 28
Hue/Saturation 1
tribal
detail 3
detail 2
detail 1
piece copy
piece
eye
cheek
head
Selective Color 3
Levels 2




BRUSHES
CLONE SOURCE
Brush Presets
Brush Tip Shape

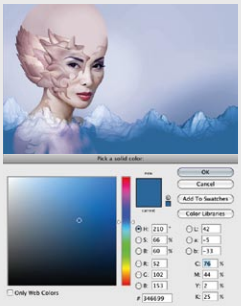
☐ Shape Dynamics
☐ Scattering
☐ Texture
☐ Dual Brush
☐ Color Dynamics
☐ Other Dynamics
☐ Noise
☐ Wet Edges
☐ Airbrush
☑ Smoothing
☐ Protect Texture

Master Diameter 100 px

95 In the Brushes palette, select a large, soft, round preset. Disable any shape dynamics applied to the preset. Alt-click (or Option-click) one of the darkest black regions at the bottom of the mountains, to sample the color. Ensure that the opacity of your brush is set to 100% in the Tool Options bar and then use the brush to paint over all the empty spaces beneath your mountains on the current layer. Change the blending mode of the layer to Overlay and then duplicate it. Control-click (or Command-click) the Layer thumbnail in the Layers palette to load a selection from the contents.

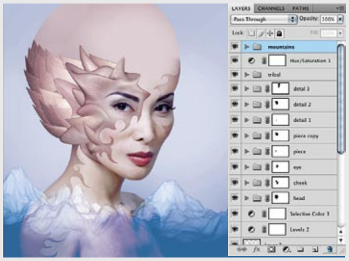
A mountainous group

Building an environment is as simple as stacking up layers inside a carefully masked group.

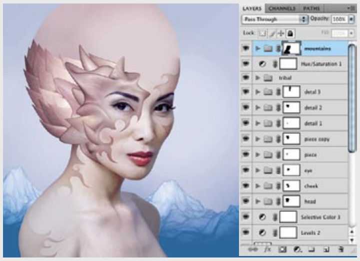

Pick a solid color:
OK
Cancel
Add To Swatches
Color Libraries
Only Web Colors

H: 210 °
S: 66 %
B: 60 %
R: 52
G: 102
B: 153
346699
L: 42
a: -5
b: -33
C: 76 %
M: 44 %
Y: 2 %
K: 25 %

1 While the selection is active, create a new solid color layer with a blue fill color. Ensure that it is lighter than the blue at the bottom of the mountains. Change the blending mode of the solid color layer to Lighten so that it only brightens darker regions beneath it.

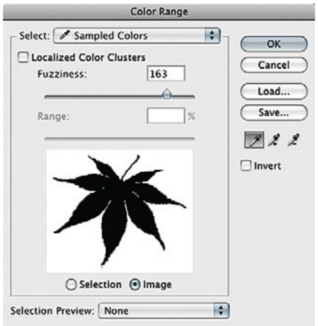

LAYERS
CHANNELS
PATHS
Pass Through
Opacity: 100%
mountains
Hue/Saturation 1
tribal
detail 3
detail 2
detail 1
piece copy
piece
eye
cheek
head
Selective Color 1
Levels 2

2 Target these three layers in the Layers palette. Press Control-G (or Command-G) to group them. Name the new group mountains and ensure that it is targeted in the Layers palette. Use the Move tool to Shift-drag the group down a little on the canvas.


LAYERS
CHANNELS
PATHS
Pass Through
Opacity: 100%
mountains
Hue/Saturation 1
tribal
detail 3
detail 2
detail 1
piece copy
piece
eye
cheek
head
Selective Color 1
Levels 2

3 Control-click (or Command-click) the first path you created in the Paths palette. This is the one that traces her neck and shoulders. When the path-based selection appears, return to the Layers palette. Ensure that the new *mountains* group is targeted and then choose Layer > Layer Mask > Hide Selection from the menu.

PART ELEVEN: Creating some 3D leaves

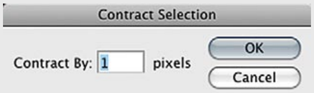


Select: Sampled Colors
☐ Localized Color Clusters
Fuzziness: 163
Selection Preview: None

96 Save your working file and open the *leaf.psd* file. Choose Select > Color Range from the menu. When the Color Range options appear, click anywhere on the white background in the image window. Then drag the fuzziness slider all the way to the right to ensure that anything remotely white in the image will be included in the resulting selection. Click OK to select the white range of color in the image. Invert the selection by pressing Control-Shift-I (or Command-Shift-I).

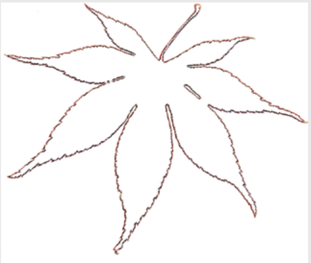
Trim and prepare

Creating and adding an alpha channel will allow us to trim our image when we bring it onto Cinema 4D.

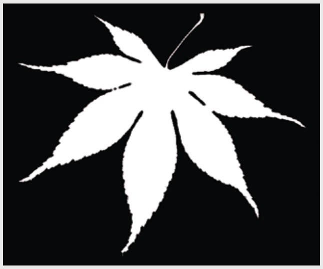


Contract By: 1 pixels

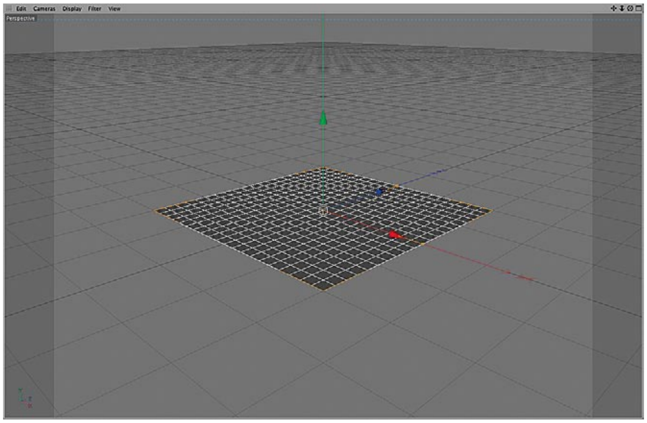
1 Choose Select > Modify > Contract from the menu. Enter a value of 2 pixels and click OK so that your modified selection border falls within the antialiased edge of the leaf in the image.

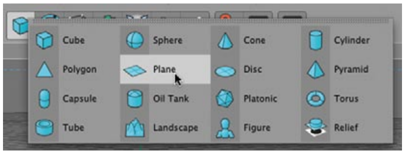


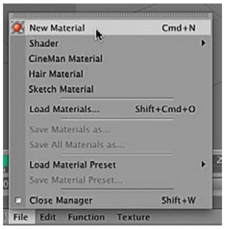
2 Press the d key to set the foreground color to black and the background color to white. Press Control-Delete (or Command-Delete) to fill the current selection with white. Next, press Control-Shift-I (or Command-Shift-I) to invert the selection.



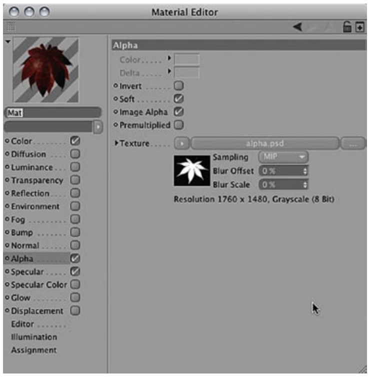
3 After inverting the selection, press Alt-Delete (or Option-Delete) to fill the inverted selection with black. Deselect and then choose File > Save As from the menu. Save the modified image as alpha.psd and close the file.

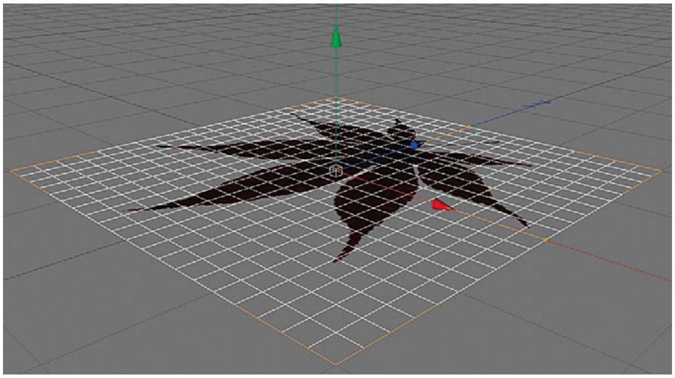

Edit Cameras Display Filter View
Perspective

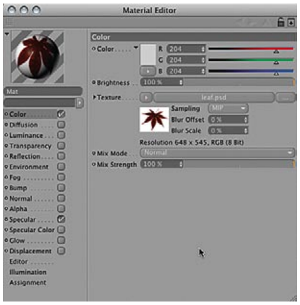

Cube
Sphere
Cone
Cylinder
Polygon
Plane
Disc
Pyramid
Capsule
Oil Tank
Platonic
Torus
Tube
Landscape
Figure
Relief

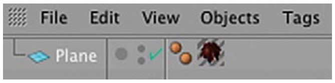

New Material Cmd+N
Shader
CineMan Material
Hair Material
Sketch Material
Load Materials... Shift+Cmd+O
Save Materials as...
Save All Materials as...
Load Material Preset
Save Material Preset...
Close Manager Shift+W
File Edit Function Texture

97 Return to Cinema 4D and create a new file. Click and hold the Primitive Objects button in the top Toolbar. Select the Plane object from the Primitive Objects palette when it appears. A 2D plane will appear in the scene. While the plane is selected, choose File > New from the Materials Manager menu to create a new material. When the new thumbnail appears in the Materials Manager, double-click it to access the Material Editor.

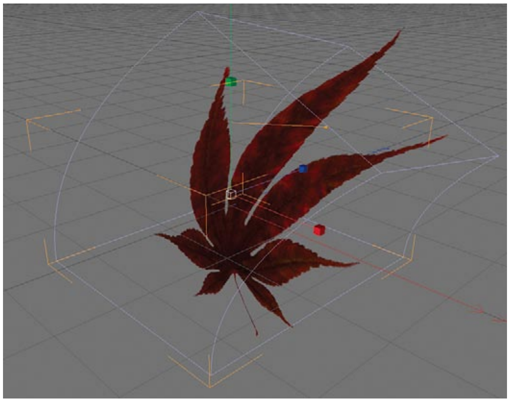

Material Editor
Alpha
Color
Delta
Invert
Soft
Image Alpha
Premultiplied
Texture
alpha.psd
Sampling MIP
Blur Offset 0 %
Blur Scale 0 %
Resolution 1760 x 1480, Grayscale (8 Bit)
Mat
Color
Diffusion
Luminance
Transparency
Reflection
Environment
Fog
Bump
Normal
Alpha
Specular
Specular Color
Glow
Displacement
Editor
Illumination
Assignment

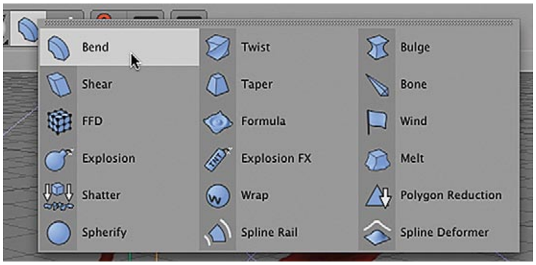


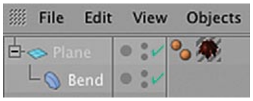

Material Editor
Color
Color
R 204
G 204
B 204
Brightness 100 %
Texture
leaf.psd
Sampling MIP
Blur Offset 0 %
Blur Scale 0 %
Resolution 648 x 545, RGB (8 Bit)
Mix Mode Normal
Mix Strength 100 %
Mat
Color
Diffusion
Luminance
Transparency
Reflection
Environment
Fog
Bump
Normal
Alpha
Specular
Specular Color
Glow
Displacement
Editor
Illumination
Assignment


File
Edit
View
Objects
Tags
Plane

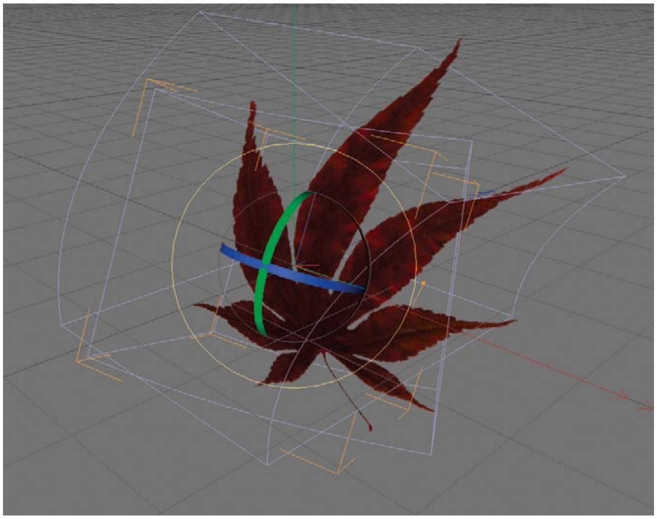
98 In the Color channel of the Material Editor, click the ... button to the right of the texture option. Navigate to the leaf.psd file included with the downloadable project files and click Open. Enable the Alpha channel at the left and then click it to access the Alpha options. In the Alpha channel of the Material Editor, click the ... button to the right of the Texture option. Navigate to the alpha.psd file you created previously and click Open. Close the Material Editor and then drag the Material thumbnail from the Material Manager onto the plane in the viewport or the Object Manager. This will apply the material to your object, and you'll see a Texture tag appear beside the plane in the Object Manager.



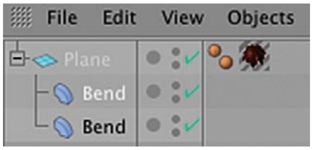

Bend
Twist
Bulge
Shear
Taper
Bone
FFD
Formula
Wind
Explosion
Explosion FX
Melt
Shatter
Wrap
Polygon Reduction
Spherify
Spline Rail
Spline Deformer

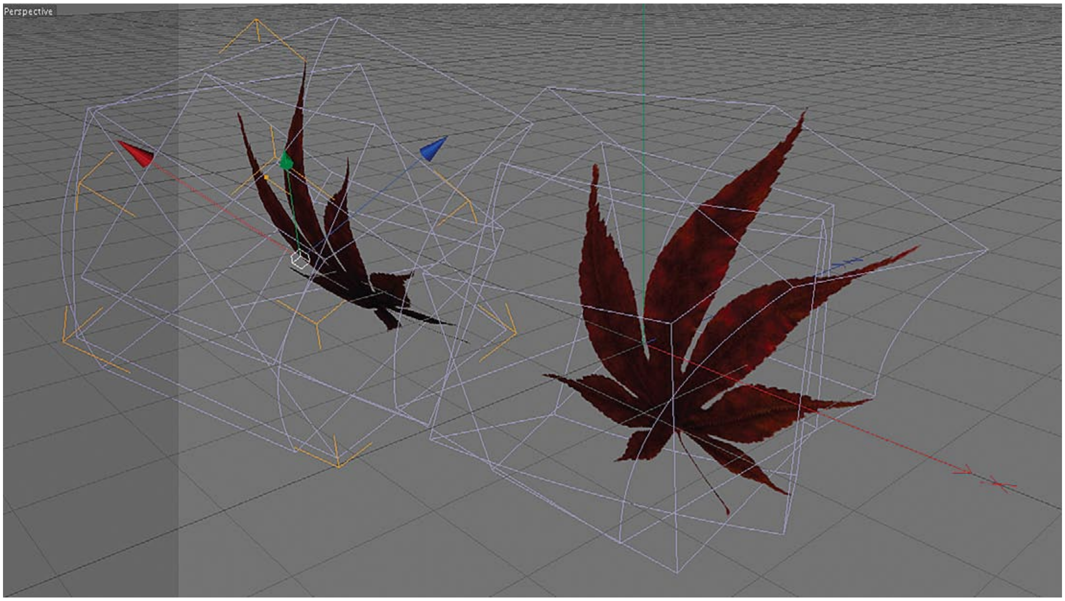

File
Edit
View
Objects
Plane
Bend

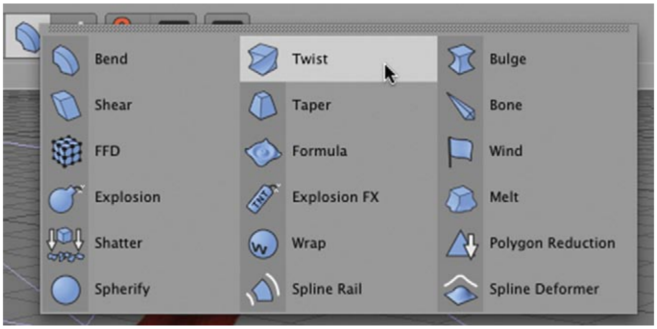
99 Select the Rotate tool from the top Toolbar and rotate the plane object so that it is standing rather than laying flat within the scene. Click and hold the Deformers button in the top Toolbar to access the Deformers palette. Select the Bend deformer. In the Object Manager, drag the Bend deformer onto the Plane object to make it a child of that object. In the viewport, click and drag the orange handle to bend the object. You can rotate or move the deformer at any time, and this will affect the way it deforms the object. Also, you might want to scale a single axis of the deformer. To do this, click the Object Tool button at the left and then select the Scale tool from the top Toolbar. Use the Scale tool to click and drag the colored box for the desired axis, to scale it independently of the others.

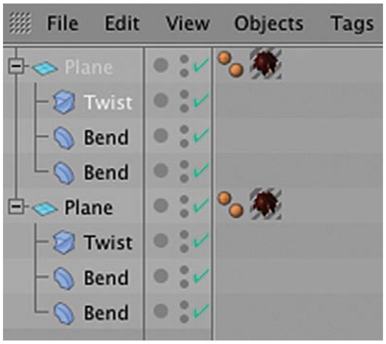


100 It is important to embrace the nondestructive nature of Cinema 4D as you're working. Freely edit various aspects of the Bend deformer. Try experimenting with different rotations, nonproportionate scaling operations, bend amount, and movements. After you're satisfied, create another Bend deformer and drag it onto the Plane object on the Object Manager. Now that this deformer is a child of the object, too, go ahead and alter the bend amount, adjust the rotation, and even move or scale the deformer as you see fit. Take note of how both deformers work to alter the plane. Remember, they can be edited independently of each other at any point.

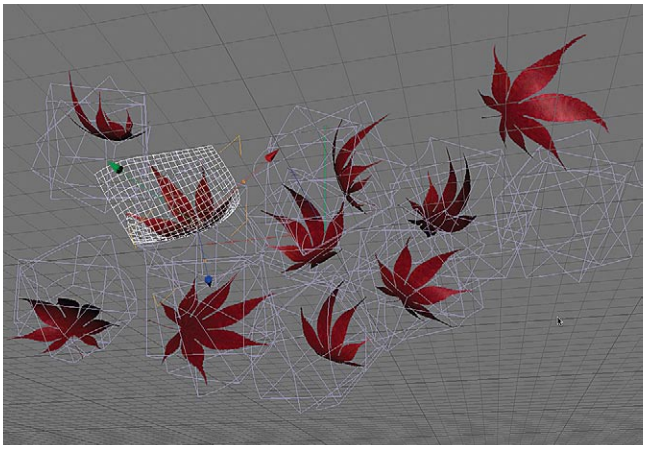

File
Edit
View
Objects
Plane
Bend
Bend

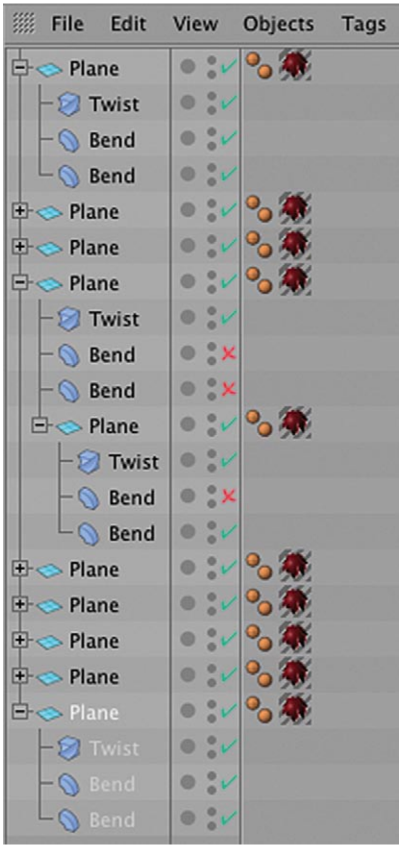

Perspective


Bend
Twist
Bulge
Shear
Taper
Bone
FFD
Formula
Wind
Explosion
Explosion FX
Melt
Shatter
Wrap
Polygon Reduction
Spherify
Spline Rail
Spline Deformer


File
Edit
View
Objects
Tags
Plane
Twist
Bend
Bend
Plane
Twist
Bend
Bend

101 Click and hold the Deformers button again in the top Toolbar. This time, select a Twist deformer from the Deformers palette. As you did previously with the Bend deformers, make it a child of the plane object and then adjust the orange handle to twist its parent object. Also Rotate, Scale, and/or Move your Twist deformer within the scene to edit its effect on the parent. When you're happy with the results of the Twist deformer, Control-click (or Control-click)the parent and drag upward in the Object Manager to duplicate it. Use the Move tool to reposition the duplicate object within the scene. Click the children of the duplicated plane in the Object Manager and edit them to make the duplicate leaf slightly different from the original.

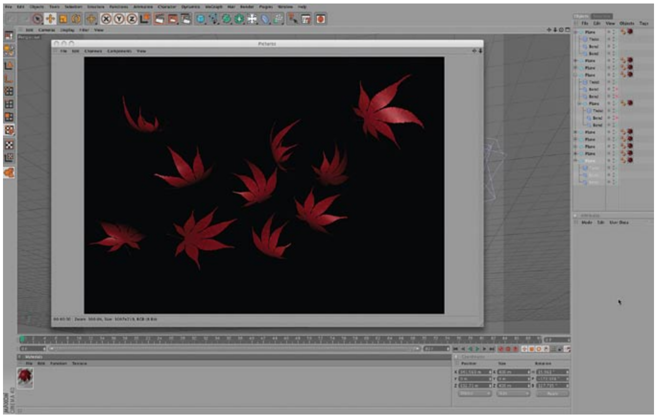




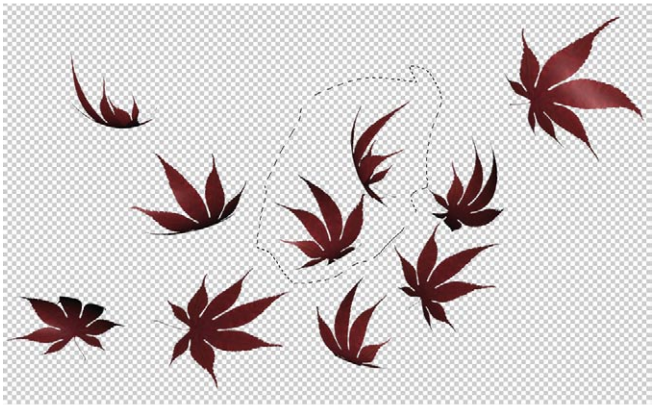
- Plane ✓
  - Twist ✓
  - Bend ✓
  - Bend ✓
- Plane ✓
- Plane ✓
- Plane ✓
  - Twist ✓
  - Bend ✗
  - Bend ✗
  - Plane ✓
    - Twist ✓
    - Bend ✗
    - Bend ✓
- Plane ✓
- Plane ✓
- Plane ✓
- Plane ✓
- Plane ✓
  - Twist ✓
  - Bend ✓
  - Bend ✓

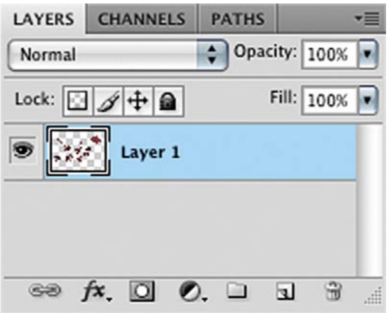
102 Use the navigational controls at the upper right of the viewport to zoom out considerably and rotate the view as well. Create a vast number of duplicates within the scene. Scatter them around, but try to ensure that they do not overlap each other within the Perspective view. Take some time and edit the individual deformers within some of the duplicates. You can disable some of the deformers entirely by clicking the green checkmarks next to them in the Object Manager. The green checkmark will turn to a red *x*, switching the deformer off until you click the x again to enable it. Continue until you're satisfied that you have achieved a diverse scattering of shapes.

103 Choose Render > Render Settings from the menu. In the Output section, set the width to 14 inches, set the height to 10 inches, and set the resolution to 72 pixels per inch. In the Save section, click the … button to the right of the Path option. Specify a destination and name the file rendering5.tif. Ensure that the Alpha Channel option is selected and then close the Render Settings window. Choose Render > Render to Picture Viewer from the menu. When the rendering is complete, quit Cinema 4D and return to your working file in Photoshop.



PART TWELVE: Create a textural effect from the leaves





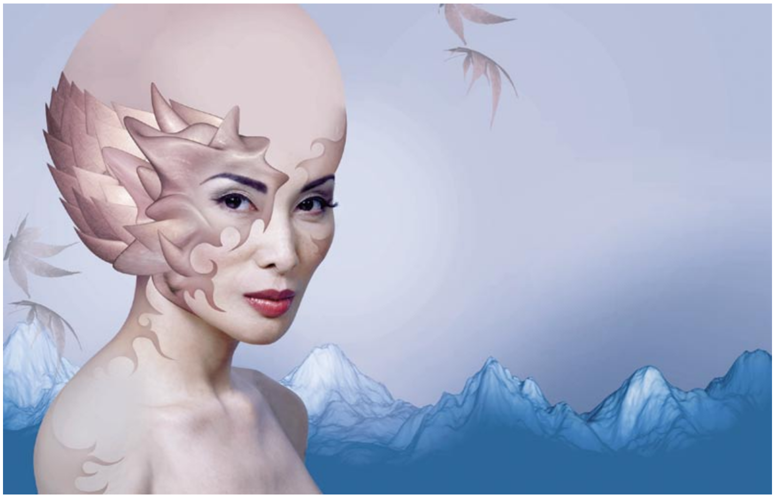
Normal

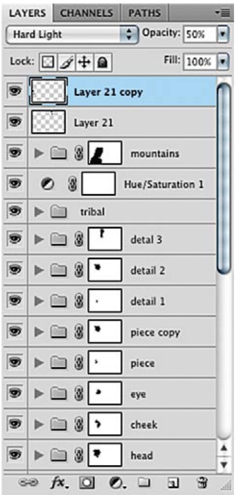
Opacity: 100%

Fill: 100%

Layer 1

104 In Photoshop, open the *rendering5.tif* file. In the Channels palette, Control-click (or Command-click) the Alpha channel included in the file to load it as a selection. Return to the Layers palette and press Control-J (or Command-J) to copy the selected contents to a new layer. Drag the background layer onto the Trash icon at the bottom of the Layers palette to delete it. Use the Lasso tool to draw a rough selection.





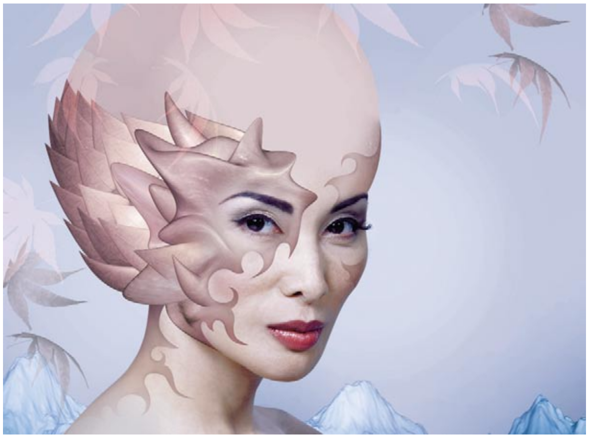
Hard Light

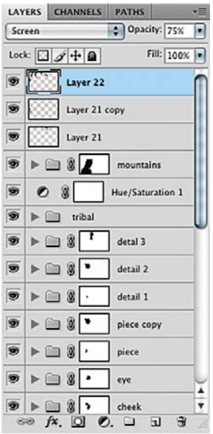
Opacity: 50%

Fill: 100%

Layer 21 copy
Layer 21
mountains
Hue/Saturation 1
tribal
detal 3
detail 2
detail 1
piece copy
piece
eye
cheek
head

105 Use the Move tool to drag the selected contents into your working file as a new layer. Change the blending mode to Hard light and reduce the opacity to 50%. Press Control-U (or Command-U) to perform a Hue/Saturation adjustment to the new layer. Reduce the Saturation by 68%, increase the Lightness by 10, and then press Control-T (or Command-T) to access Free Transform. Rotate, Resize, and Reposition the layer contents so that the two leaves are more or less upside down and extending beyond the top of the canvas. Press Enter to apply the transformation and then use the Move tool to Alt-drag (or Option-drag) the leaves to the lower left behind her head, duplicating the layer. Perform a Hue/Saturation adjustment to slightly reduce the saturation of the leaves on this layer.



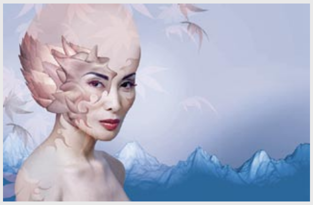


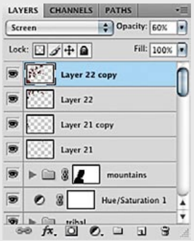
Screen
Opacity: 75%
Lock:
Fill: 100%
Layer 22
Layer 21 copy
Layer 21
mountains
Hue/Saturation 1
tribal
detail 3
detail 2
detail 1
piece copy
piece
eye
cheek

106 Return to the *rendering5.tif* file and deactivate the current selection. Use the Move tool to drag the contents of the entire layer into the working file as a new layer. Activate Free Transform and rotate the leaves as well as adjust their size. You want the leaves to, more or less, surround her head at the left of the canvas. Press the Enter key to apply the transformation and then change the blending mode of the layer to Screen. Reduce the opacity of the layer to 90%.

Building up the texture

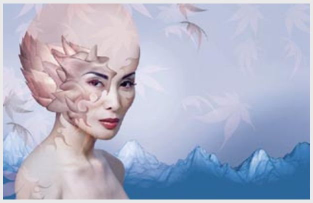
Continue to stack up layers while repositioning and altering blending options, to build up the leafy texture overall.

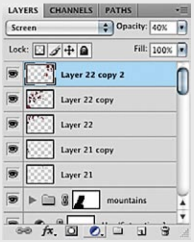




Screen
Opacity: 60%
Lock:
Fill: 100%
Layer 22 copy
Layer 22
Layer 21 copy
Layer 21
mountains
Hue/Saturation 1
tribal

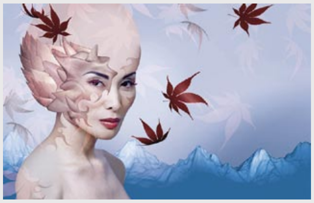
1 Duplicate the layer and use Free Transform to adjust the size and rotation as you move it lower down and toward the left of the canvas. Reduce the layer opacity to 60%.

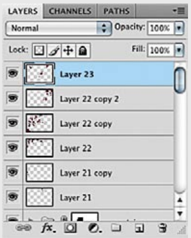




Screen
Opacity: 40%
Lock:
Fill: 100%
Layer 22 copy 2
Layer 22 copy
Layer 22
Layer 21 copy
Layer 21
mountains

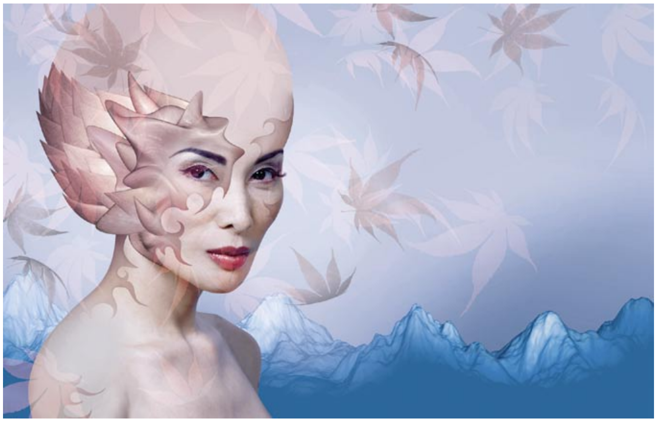
2 Duplicate the current layer. Use the Move tool to position the newest duplicated layer higher and to the right of the canvas. Reduce the opacity of this layer to 40%. Return to the *rendering5.tif* file.

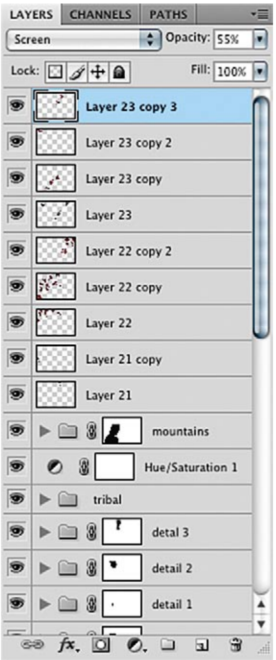




Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 23
Layer 22 copy 2
Layer 22 copy
Layer 22
Layer 21 copy
Layer 21

3 Use the Lasso tool to select leaves, one at a time, and drag them into the working file as new layers. Position each layer with the Move tool. When you're happy with the result, target all these individual leaf layers and merge them by pressing Control-E (or Command-E).

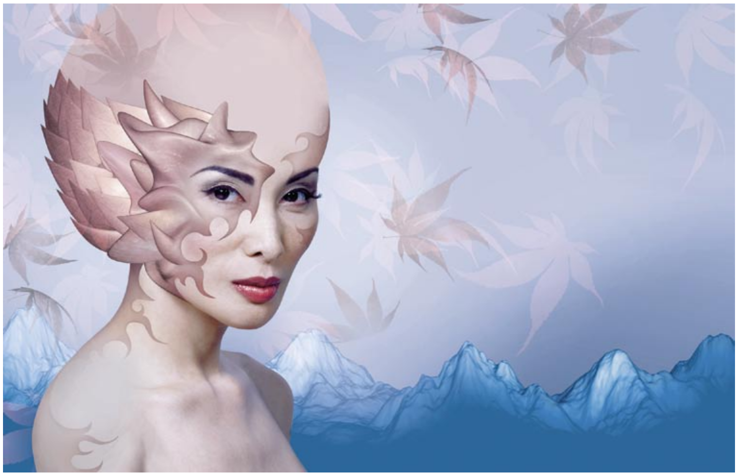


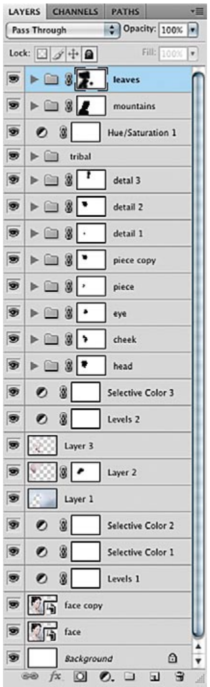


Screen Opacity: 55%
Lock: Fill: 100%

LAYERS
CHANNELS
PATHS
Layer 23 copy 3
Layer 23 copy 2
Layer 23 copy
Layer 23
Layer 22 copy 2
Layer 22 copy
Layer 22
Layer 21 copy
Layer 21
mountains
Hue/Saturation 1
tribal
detal 3
detail 2
detail 1
fx.

107 Press Control-U (or Command-U) to perform a Hue/Saturation adjustment. Reduce the saturation considerably until the leaves appear to be almost gray. Reduce the opacity of the layer to 33%. This will add some subtle, dark leaves to the composition. Next, have some fun scattering some more lighter leaves around. Begin by duplicating the current layer. Change the blending mode of the duplicate layer to Screen and increase the opacity of the layer to 55%. Use Free Transform to resize, rotate, and reposition the contents of the layer. Next, duplicate this layer and reposition the contents on the canvas area. Repeat this process one more time, and that should be sufficient.

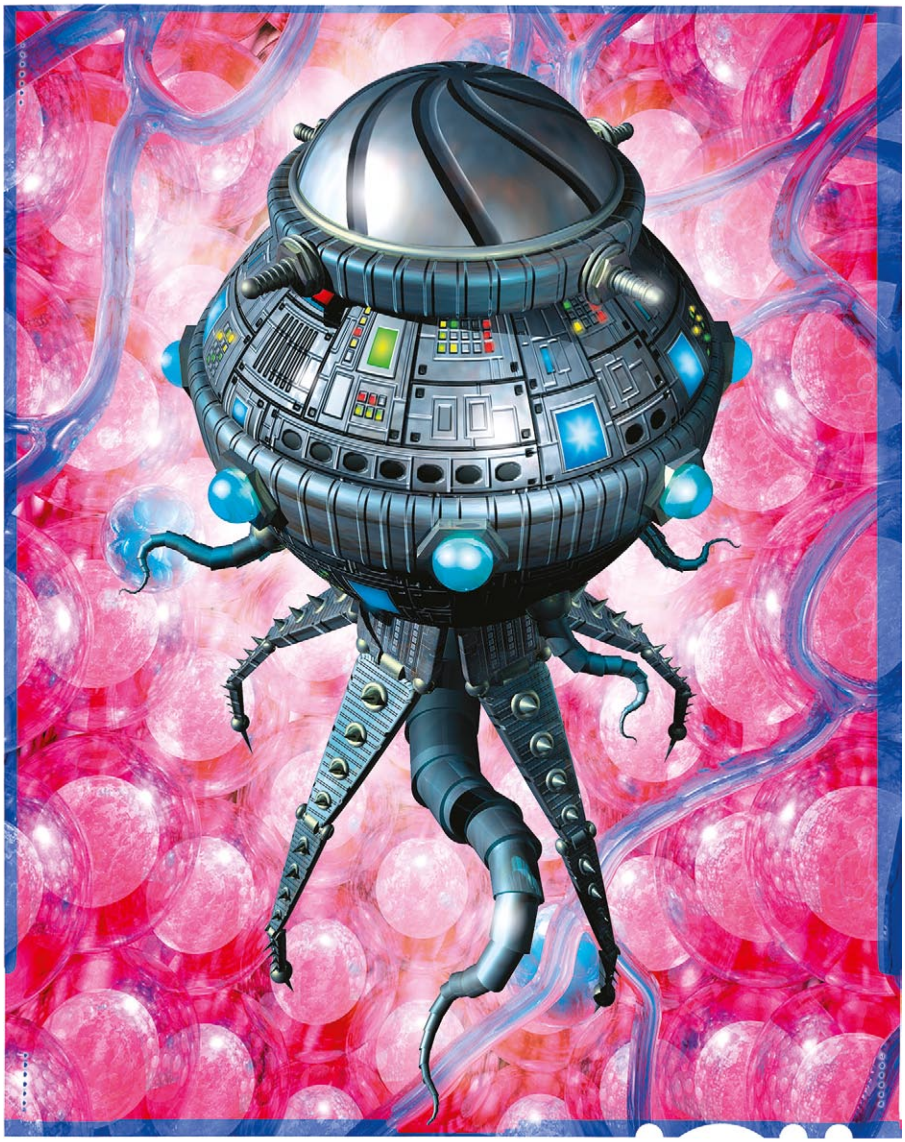




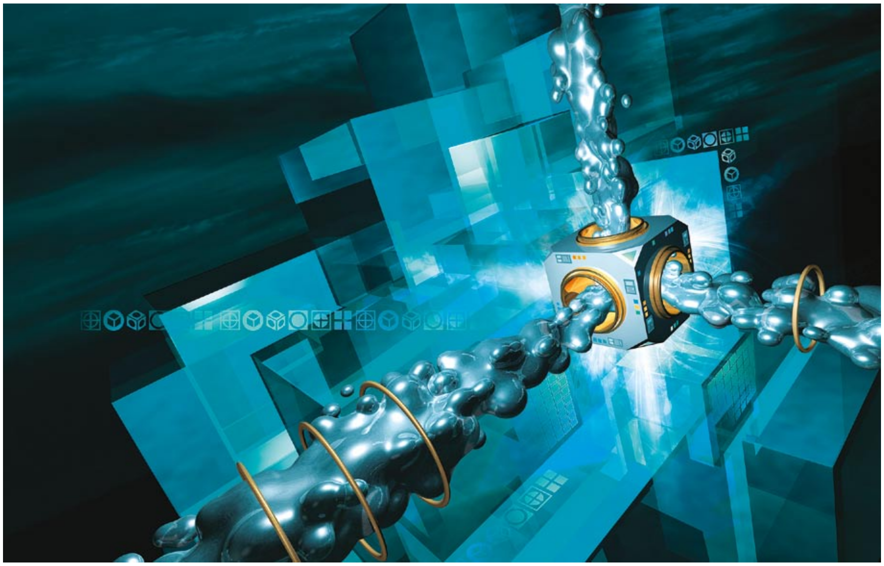
Pass Through Opacity: 100%
Lock: Fill: 100%

LAYERS
CHANNELS
PATHS
leaves
mountains
Hue/Saturation 1
tribal
detal 3
detail 2
detail 1
piece copy
piece
eye
cheek
head
Selective Color 3
Levels 2
Layer 3
Layer 2
Layer 1
Selective Color 2
Selective Color 1
Levels 1
face copy
face
Background
fx

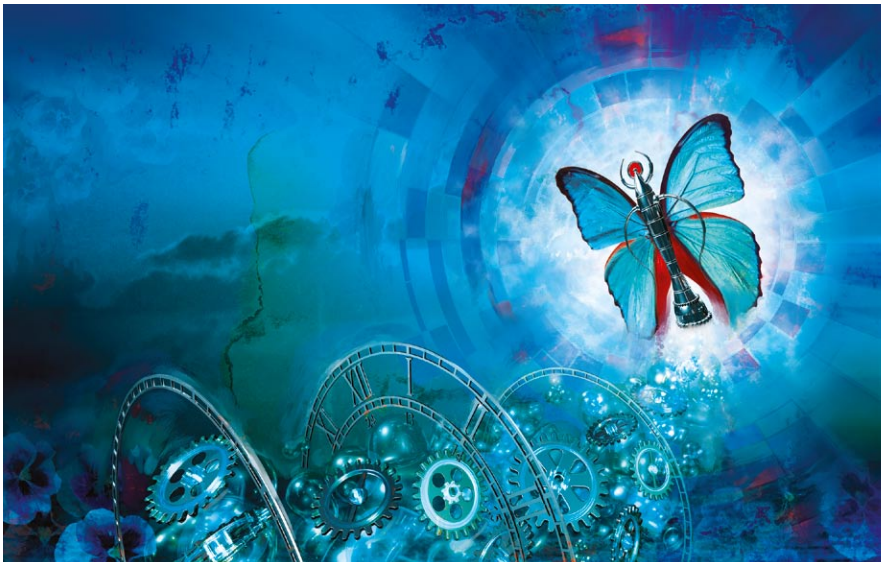
108 In the Layers palette, target all the layers that make up the leafy pattern and group them by pressing Control-G (or Command-G). Add a mask to the group and select the Gradient tool. Use the Foreground to Transparent preset and select the Radial method in the Tool Options bar. Set the foreground color to Black and then create a series of gradients in the mask to gently hide leaves that overlap her head, face, and shoulders or that appear too prominent within the scene. Feel free to tweak as you see fit from this point on. The file is constructed in a modular manner so that you can directly alter individual components without adversely affecting other parts of the composition.



Here is another example of separate 3D rendered work that was combined in Photoshop. The nanotech robot was a separate rendering from the cellular material in the background. Some of the texture details, such as the light and buttons, were embellished after the fact using Photoshop's paint tools.



In these two images, you can see the benefits of experimenting with the incorporation of texture and photographic elements as well. The top image uses a simple stormy sky photo to set the mood. However, the image below relies on photographed elements for the wings of the main creature. It also has some tactile surface texture applied to it to make it feel more natural.



Chapter 7

Sculpting Raw Materials

Combining ZBrush with Photoshop

When I first caught wind of ZBrush, I didn't believe it would actually work. It promised something that all of us who dabble in 3D from time to time wanted, but deep down we knew it couldn't really be possible. As a 2D artist, I always found 3D software unintuitive on some level. I just want to be an artist and not get bogged down with tools or caught up in the process. I want to work intuitively, and until I tried using ZBrush I thought that intuitive 3D was a myth.

ZBrush is an amazingly powerful tool. Perhaps equally important, it is incredibly intuitive. This is a 3D application made for artists. It is likely that first-time users will grumble about the interface and how foreign it feels. Granted, it is different from what you're accustomed to when working with Adobe software. But when you come to grips with it, you'll see that it is a truly effective design, and the software is a true joy to work with. ZBrush is an endless labyrinth of features and functions that will seriously blow your mind. In this chapter, we'll scratch the surface of what is possible, using ZBrush to create raw sculpted components. We'll then take all those components into Photoshop and build a stunning textural illustration.

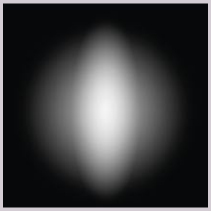
Versions	**Requirements and Recommendations**
Photoshop CS4 ZBrush 3.2	In addition to Photoshop, you'll need to download the 30-day trial version or purchase a copy of ZBrush. ZBrush is available from www.pixologic.com. And while ZBrush works with a mouse, it is infinitely beneficial to use a pressure-sensitive tablet to take full advantage of the intuitive control that ZBrush can offer.

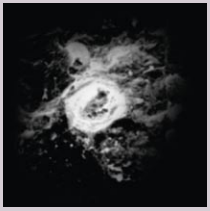
What you'll learn in this chapter

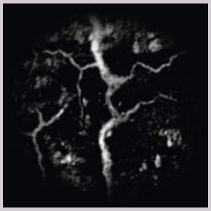
Creative Techniques and Working Methods

Learn the relationship between height and value

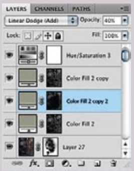
Something of interest when making the jump from 2D to 3D is the way that 2D grayscale value can translate into a displacement, or height information, in a 3D program. The alpha functionality within ZBrush is a perfect example of this. Alphas are used with brushes in ZBrush, much like brush tips are used with brushes in Photoshop. In Photoshop, the grayscale data that makes up the brush tip controls how paint is deposited within the stroke. Areas of black deposit 100% of the paint. Areas of white deposit no paint. And areas of gray deposit amounts of paint relative to their black percentages. In ZBrush, the grayscale data within an alpha is used to determine the height at which an area is displaced when you paint over it. Areas of white are 100% displaced. Areas of black are not displaced at all. Areas of gray displace based on the percentage of white within the grayscale value. To put it into perspective, try to think of how alpha channels work in Photoshop. The logic is quite similar, yet instead of displacement, white determines the degree of selection in an alpha channel.







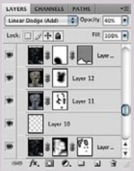
Tools, Features, and Functions



Linear Dodge (Add) Opacity: 40%
Lock: Fill: 100%

Blending modes and opacity

Apart from the act of building all the components, a major ingredient in the visual success of this image is how everything blends together when you stack it all up in the Layers palette. When you move into the Photoshop compilation portion in the latter part of this chapter, you'll go through the process of combining different blending modes and opacity settings until it feels like second nature.

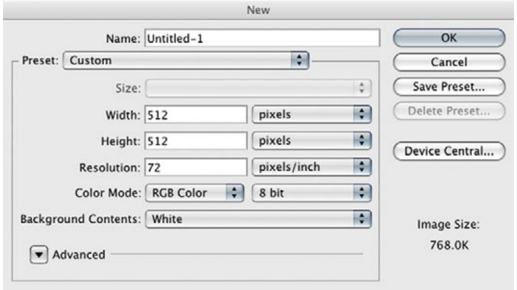


Linear Dodge (Add) Opacity: 40%
Lock: Fill: 100%

Masks

Equally important as the way the layers blend together is what exactly is revealed on each layer. In this chapter, you'll learn to methodically mask layers in a variety of diverse ways, yielding impressive results along the way.

PART ONE: Preparing alphas for ZBrush



Name: Untitled-1
Preset: Custom
Size:
Width: 512 pixels
Height: 512 pixels
Resolution: 72 pixels/inch
Color Mode: RGB Color 8 bit
Background Contents: White
Image Size: 768.0K

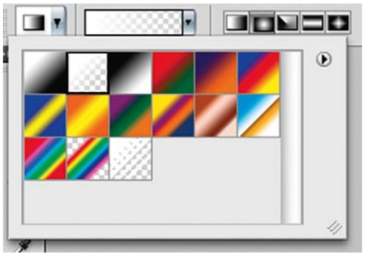
1 Before we begin sculpting in ZBrush, we'll create a few images to be used as alphas. An alpha in ZBrush is similar to a custom brush tip in Photoshop. Well, sort of. Except rather than depositing paint, it controls how displacements occur as you paint. Confused? Don't worry if it doesn't entirely make sense to you right now. All will become clear as you work your way through this chapter. To get started, create a new file in Photoshop that is 512 pixels by 512 pixels at 72 ppi, RGB mode. The color of the canvas doesn't matter, so go ahead and leave it set to white. Press the d key to set the foreground and background colors to their default settings of black and white.

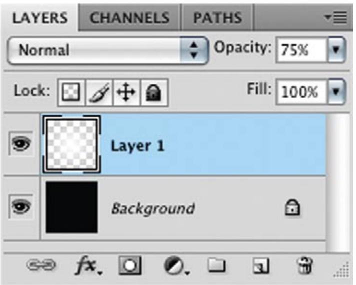
Project files

All the files needed to follow along with this chapter and create the featured image are available for download on the accompanying Website, in the project files section. Visit www.beyondphotoshopthebook.com.

Skipping ahead

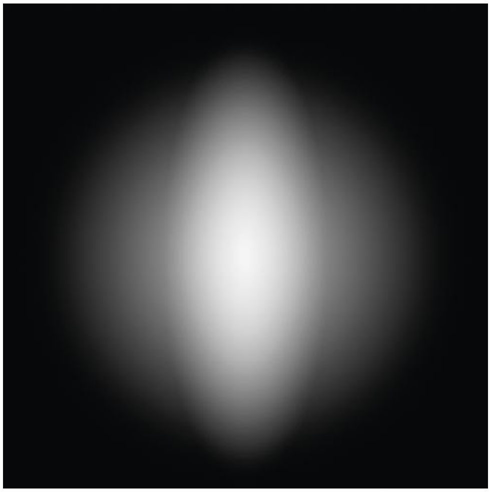
If you decide that you do not want to complete the ZBrush portion of this project and simply want to get on with the comprehensive Photoshop work, you can skip ahead to Part 5 of this chapter and begin there. However, it would be beneficial to read through the initial stages of the project as well to gain insight into the entire process.

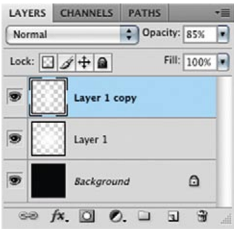




Normal
Opacity: 75%
Fill: 100%
Layer 1
Background

2 Fill the background with black by pressing Alt-Delete (Option-Delete) on the keyboard. Click the Create a New Layer button in the Layers palette. With the new layer targeted, select the Gradient tool from the Toolbar. Press the x key to invert the foreground and background colors so that white is now the foreground color. In the Tool Options bar, select the Foreground to Transparent preset from the Gradient picker and select the Radial method. Leave the opacity set to 100 and then click the center of the canvas and drag outward, almost to the edge. Reduce the opacity of the layer to 75%.





LAYERS CHANNELS PATHS

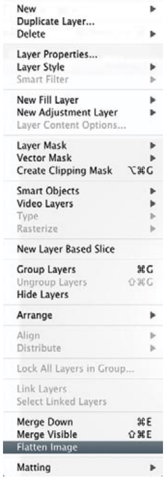
Normal Opacity: 85%

Lock: Fill: 100%

Layer 1 copy

Layer 1

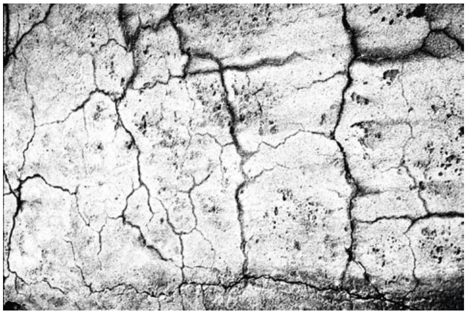
Background

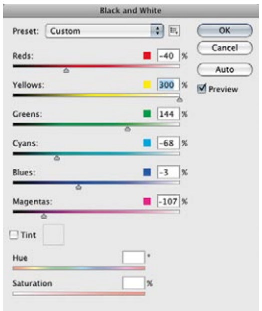

New
Duplicate Layer...
Delete
Layer Properties...
Layer Style
Smart Filter
New Fill Layer
New Adjustment Layer
Layer Content Options...
Layer Mask
Vector Mask
Create Clipping Mask ⌥⌘G
Smart Objects
Video Layers
Type
Rasterize
New Layer Based Slice
Group Layers ⌘G
Ungroup Layers ⇧⌘G
Hide Layers
Arrange
Align
Distribute
Lock All Layers in Group...
Link Layers
Select Linked Layers
Merge Down ⌘E
Merge Visible ⇧⌘E
Flatten Image
Matting

Alphas available

If you don't want to create your own alphas or are not happy with the outcome, worry not. The alphas created in Part 1 are also included in the downloadable project files for this chapter. Feel free to use them if you prefer; the names are the same as those specified in Part 1.

3 Duplicate the layer by dragging it onto the Create a New Layer icon at the bottom of the Layers palette and press Control-T (or Command-T) to access Free Transform. When the bounding box appears, hold down the Alt (or Option) key as you click the left or right center handle and drag inward. When you've significantly scaled the gradient horizontally, press the Enter key to apply the transformation. Increase the opacity of the current layer to 85% and then select Layer > Flatten Image from the menu. Choose File > Save As to save the image as a .psd file. Name the file bump.psd.





Black and White

Preset: Custom

Reds: -40 %

Yellows: 300 %

Greens: 144 %

Cyans: -68 %

Blues: -3 %

Magentas: -107 %

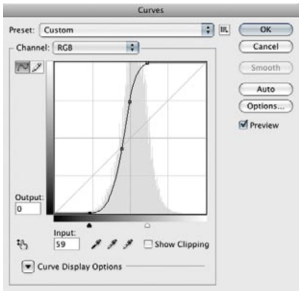
☐ Tint

Hue °

Saturation %

☑ Preview

OK
Cancel
Auto



Curves

Preset: Custom

Channel: RGB

Output: 0

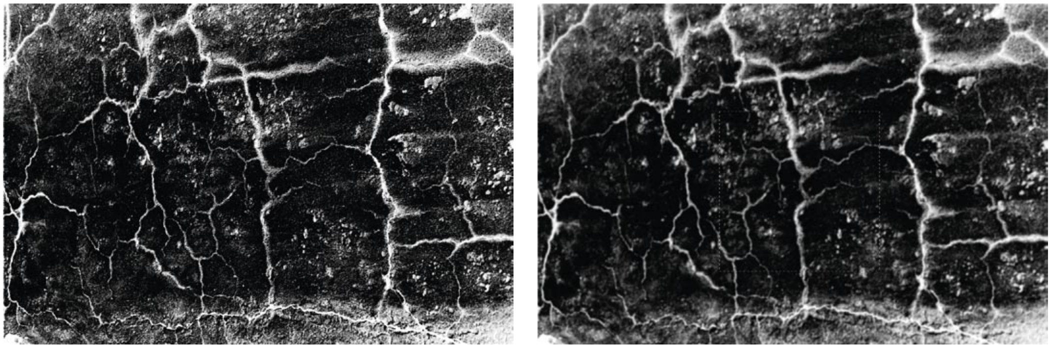
Input: 59

☐ Show Clipping

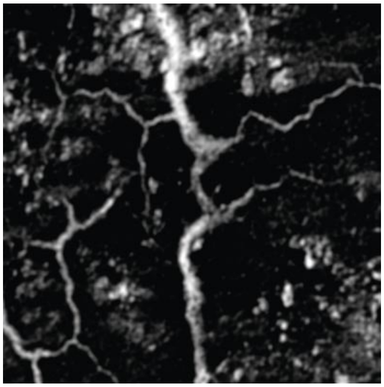
☑ Preview

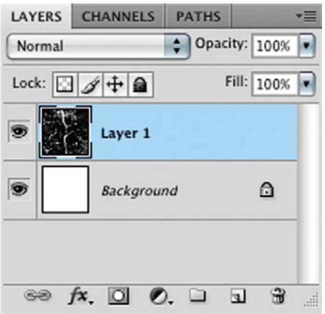
OK
Cancel
Smooth
Auto
Options...
Curve Display Options

4 Open the *cement1.jpg* file. Choose Image > Adjustments > Black and White from the menu. The goal is to convert this image to grayscale and maximize the contrast at the same time. From the preset menu, choose the infrared option as your starting point. Then drag the Yellows slider to the right until it reads 300. Click OK and then press Control-M (or Command-M) to make a Curves adjustment. The first thing you'll need to do in the Curves dialog is to drag the left and right input level sliders at the bott om of the curve closer to the center. Then click the actual curve itself to add a couple of additional points. Move the points around until your curve starts to look like the one shown here. Basically, all you're trying to do is maximize the contrast overall.

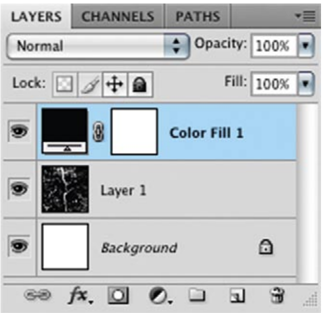


5 Press Control-I (or Command-I) to invert the image. Then choose Filter > Blur . Gaussian Blur from the menu. Specify an amount that blurs the image just enough to remove the small, noisy, and sharp bits but still preserves the inverted cracks. Click OK and select the Rectangular Marquee tool. Hold down the Shift key to constrain the aspect ration to a perfect square. Then click and drag to select a region of the image that contains some interesting details.



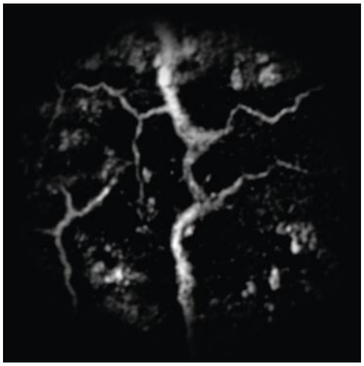


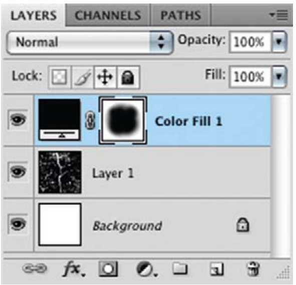
Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 1
Background



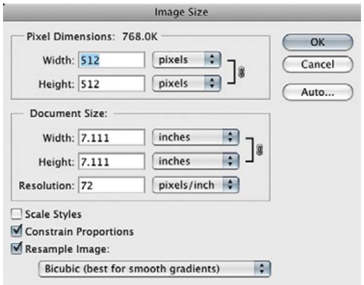
Normal
Opacity: 100%
Lock:
Fill: 100%
Color Fill 1
Layer 1
Background

6 Press Control-C (or Command-C) to copy the selected contents, and then press Control-N (or Command-N) to create a new file. Do not close the *cement1.jpg* file yet. In the new file dialog box, ensure that the Preset menu is set to Clipboard and click OK. Then press Control-V (or Command-V) to paste the copied image in as a new layer. If you want to enhance the contrast further, go ahead and perform another Curves adjustment. Choose the solid color option from the Create New Fill or Adjustment Layer menu at the bottom of the Layers palette. When the picker appears, choose a black color and click OK. Do not be alarmed when the entire image is obscured by black. We will remedy that next.



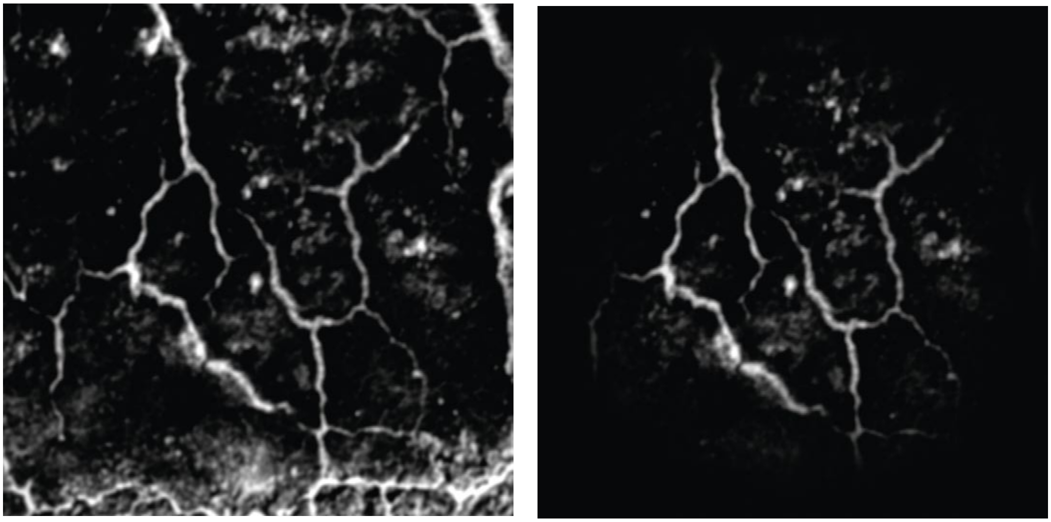


Normal
Opacity: 100%
Fill: 100%
Color Fill 1
Layer 1
Background

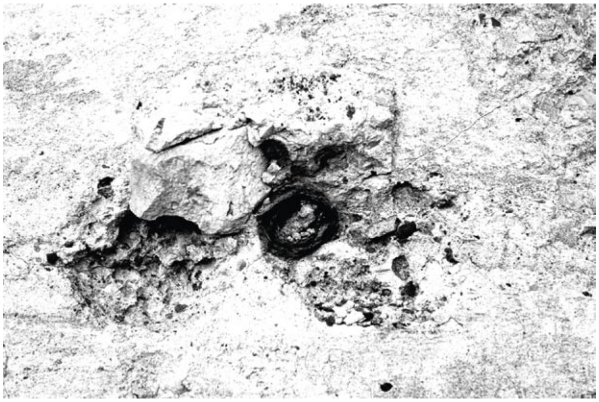


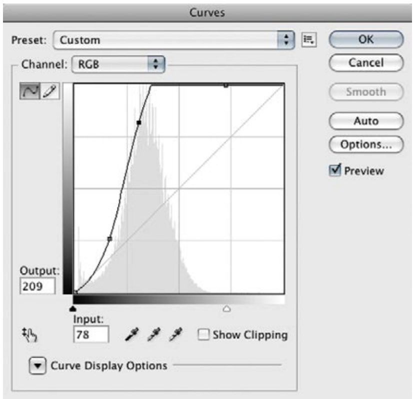
Pixel Dimensions: 768.0K
Width: 512 pixels
Height: 512 pixels
Document Size:
Width: 7.111 inches
Height: 7.111 inches
Resolution: 72 pixels/inch
☐ Scale Styles
☑ Constrain Proportions
☑ Resample Image:
Bicubic (best for smooth gradients)

7 Target the new solid color layer's mask in the Layers palette and select the Gradient tool. Press the x key to set the foreground color to black. In the Tool Options bar, choose the Foreground to Transparent preset and enable the Radial method. With the opacity still set to 100%, click and drag from the center out, within the layers mask, to reveal the imagery beneath. Click and drag to create additional gradients within the mask as you deem necessary. Simply ensure that there is some solid black at each edge of the canvas. Flatten the image and then choose Image > Image Size from the menu. Alter the dimensions so that the image is 512 pixels by 512 pixels at a resolution of 72 ppi. Save the image as a .psd file and name it cement1.psd.



8 Return to the open *cement1.jpg* file and draw another square selection around a different region of detail. This time, because this is the last alpha we'll create from this file, we can simply crop the image instead of copying and pasting. Choose Image > Crop from the menu to crop the file to your selection border. Again, feel free to perform another curve adjustment or any other tonal adjustment if you feel it is needed. Next, create a solid black layer and mask it using the exact same method you used previously. When you're happy with the result, flatten the image and adjust the image size so this file is also 512 by 512 at 72 ppi. Save the file as a .psd file and name it cement2.psd.





Preset: Custom

Channel: RGB

Output: 209

Input: 78

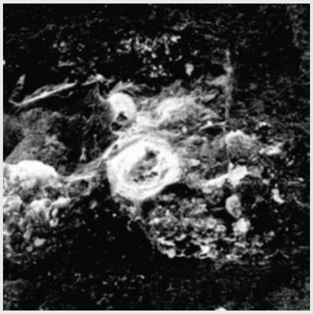
☐ Show Clipping

☑ Preview

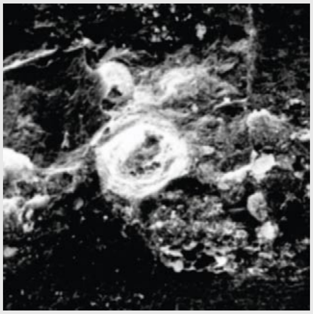
9 Open the *cement2.jpg* file. Just as you did with the previous image, choose Image > Adjustments > Black and White from the menu. From the Preset menu choose the High Contrast Red Filter option. This is good for an initial conversion, but again, you'll need to press Control-M (or Command-M) to make a Curves adjustment. This time, drag the highlight input level slider at the bottom left considerably to the right. Then add a couple of points to the curve by clicking it. Drag the points to edit the curve until it begins to look like the one shown here, greatly increasing the contrast and brightening light areas.

Creating another alpha

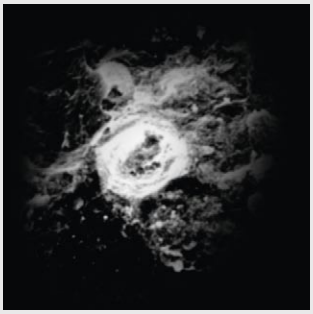
Follow the same procedure one more time to create another alpha destined for ZBrush.



1 Press Control-I (or Command-I) to invert the image, then choose Filter > Blur > Gaussian Blur from the menu. Enter a small amount to reduce the sharpness and remove some minute details from the image.



2 Use the Rectangular marquee tool to click and drag while holding down the Shift key to create a square selection around a region of interesting detail. Try to get the round, white detail near the center. Select Image > Crop from the menu and then use Image > Image Size to change the image to 512 pixels by 512 pixels at 72 ppi.

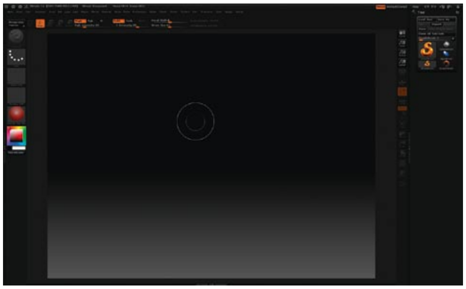


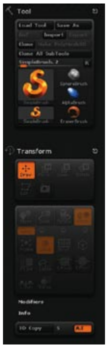
3 Create a new, black, solid color layer and then edit the mask by adding Black to Transparent gradients into the mask. Gently reveal the underlying layer this way, ensuring that there is solid black at every edge. Flatten the layers and save the file as cement3.psd.

PART TWO: Sculpting in ZBrush

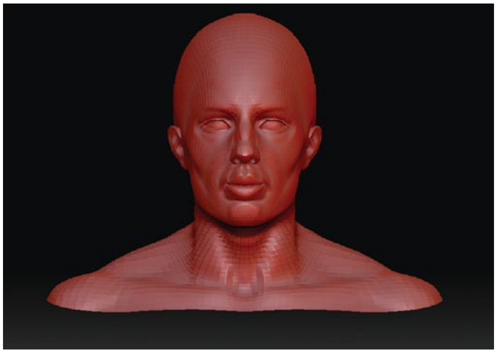
Getting familiar with ZBrush

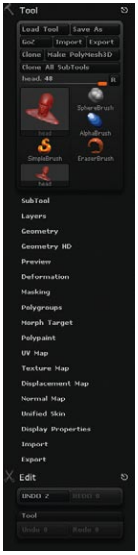
Although I'll walk you through each step of the ZBrush process as it pertains to the creation of this chapter's artwork, you might want to do a little brushing up on your own. The Pixologic Website has some excellent training videos in its Education section. The online training is free and easy to follow. ZBrush is capable of so many things. What I'm showing you in this chapter



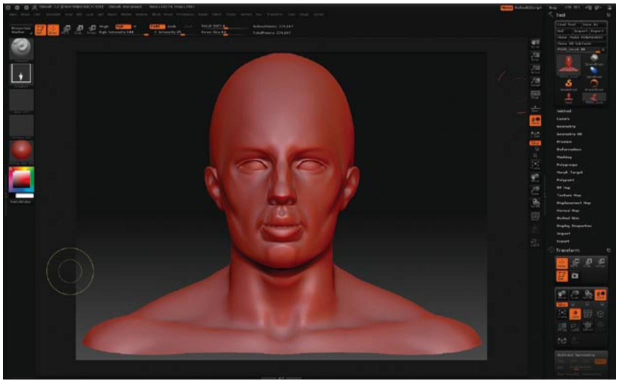

Tool
Load Tool
Save As
Import
Export
Clone
Clone All SubTools
Transform
Modifiers
Info

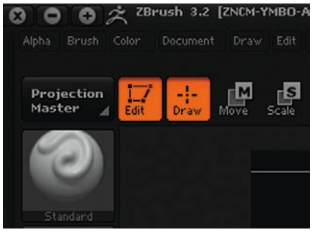
10 After you've downloaded and installed the 30-day trial version of ZBrush from the Pixologic Website, go ahead and launch it. Depending on the version you're using and the way things are configured on your machine, it is likely you'll immediately be confronted with a script that asks you what you want to do. Although the script offers a number of tools to start with, simply press the Esc key to make it go away. This will give you a blank canvas to begin with. Chances are that the Tool palette already appears in the Tray at the right, as shown here. If it doesn't, click the Tool button and then click the icon in the upper left of the palette, and it will be placed in the tray. Next, click the Transform button at the top to reveal the Transform palette, and use the aforementioned method to add it into the Tray on the right.

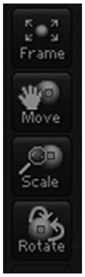



Tool
Load Tool
Save As
GoZ
Import
Export
Clone
Make PolyMesh3D
Clone All SubTools
head. 48
SphereBrush
head
AlphaBrush
SimpleBrush
EraserBrush
head
SubTool
Layers
Geometry
Geometry HD
Preview
Deformation
Masking
Polygroups
Morph Target
Polypaint
UV Map
Texture Map
Displacement Map
Normal Map
Unified Skin
Display Properties
Import
Export
Edit
UNDO 2
REDO 0
Tool
Undo
Redo

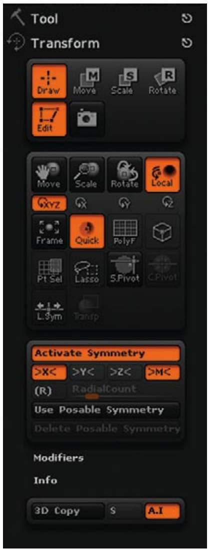
11 In the Tool palette, click the Load tool button and navigate to the *head.ztl* file that is included with the project files for this chapter. The head tool will immediately appear in the Tool palette, automatically becoming the currently selected tool. For this reason, you'll notice a subpalette appear beneath the Tool palette. If this list appears daunting or overwhelming, worry not; we're not going to delve into anything too complicated here. We're simply going to use ZBrush to sculpt some raw materials to be incorporated into a Photoshop composition later on. Click and drag the canvas while the Head tool is selected to place the head mesh on the canvas. Holding down the Shift key as you drag will assist in constraining the rotation of the mesh.

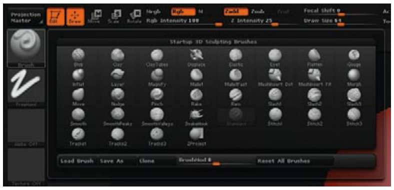


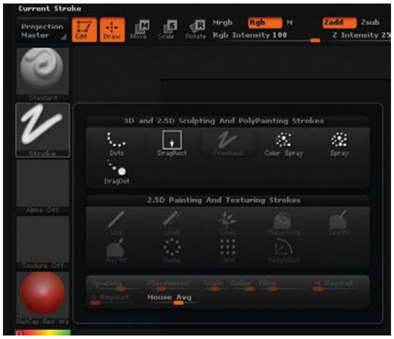

ZBrush 3.2 [ZNCM-YMBO-A
Alpha
Brush
Color
Document
Draw
Edit
Projection Master
Edit
Draw
Move
Scale
Standard


Frame
Move
Scale
Rotate

12 Click the Edit button in the upper right. Then, to the immediate left of the tray at the right, click and drag the Rotate button while holding down the Shift key to ensure that you're viewing the mesh straight on. Then click the Frame button to fill the canvas area with the mesh. Also, you can use the Scale, Move, and Rotate buttons in the same click-and-drag manner to position or resize the mesh on the canvas at any point, provided that the Edit button remains enabled. Press Control-D (or Command-D) a couple of times to subdivide the mesh, increasing the polygon count and thus smoothing the surface.


Tool
Transform
Draw
Move
Scale
Rotate
Edit
Move
Scale
Rotate
Local
XYZ
Frame
Quick
PolyF
Pt Sel
Lasso
S.Pivot
C.Pivot
L.Sym
Transp
Activate Symmetry
>X<
>Y<
>Z<
>M<
(R)
RadialCount
Use Posable Symmetry
Delete Posable Symmetry
Modifiers
Info
3D Copy
S
A.I


Projection Master
Startup 3D Sculpting Brushes
Load Brush
Save As
Clone
Reset All Brushes


Current Stroke
Projection Master
Edit
Draw
Move
Scale
Rotate
Mrgb
Rgb
M
Rgb Intensity 100
Zadd
Zsub
Z Intensity 25
Standard
Stroke
Alpha Off
Texture Off
3D and 2.5D Sculpting And PolyPainting Strokes
Dots
DragRect
FreeHand
Color Spray
Spray
DragDot
2.5D Painting And Texturing Strokes
Spacing
Placement
Scale
Color
Flow
Repeat
Mouse Avg

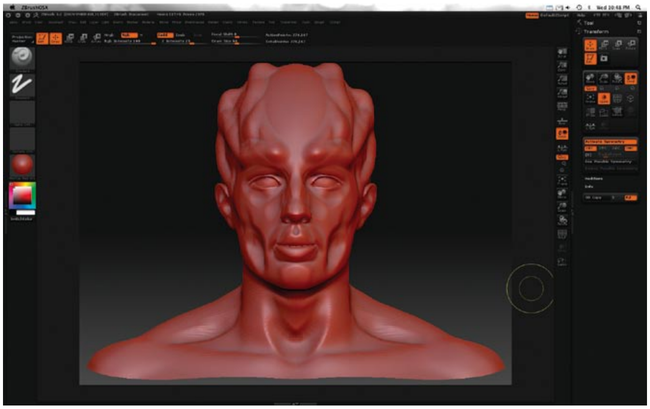
13 The tray at the right can get cluttered fast, so click the word Tool above the Tool palette to collapse it while we're not using it. You can expand it anytime by simply clicking in the same region. Next, click the Activate Symmetry button in the Transform palette. Ensure that the > X < and > M < buttons are enabled. This will ensure that any sculpting we do to one side of the head will be mirrored on the other. Click the Brush button at the left and select the Standard sculpting brush. Then, beneath that, click the Stroke button and select the Freehand stroke.

Dropping to the canvas

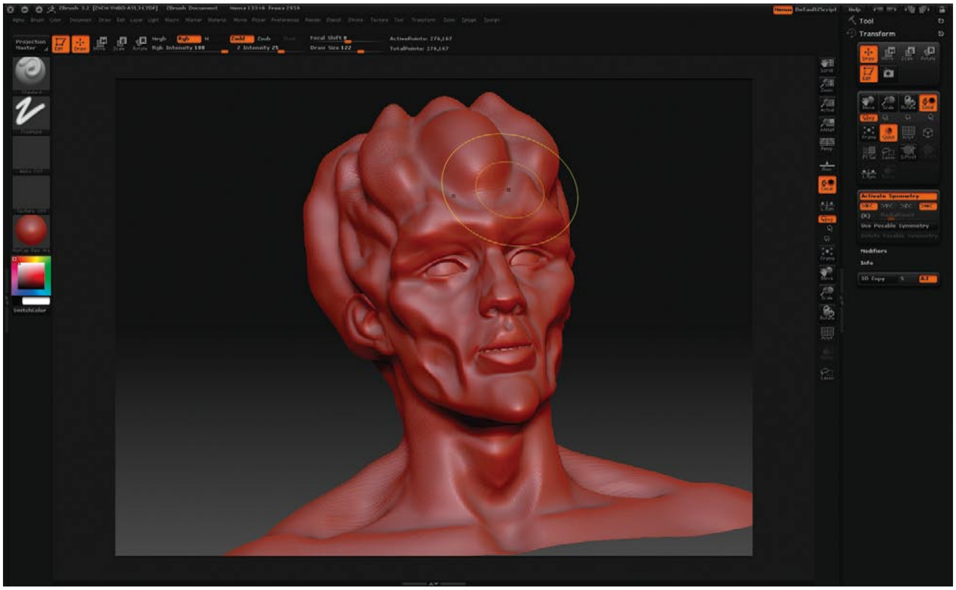
One thing that takes some getting used to in ZBrush is that a 3D mesh can be dropped to the canvas, making it no longer editable in 3D space. For that reason it is essential that you keep the Edit button enabled as you work. However, if you ever find that you cannot edit or reposition your mesh, worry not; all is never lost in ZBrush. Your tool in its most recent state is always available in the Tool palette. You simply need to select it, then click and drag the canvas to create a new, editable instance of the mesh. But don't forget to immediately enable the Edit button. If the previous mesh that has been dropped to the canvas is visible while you're working with your new mesh, you can clear the canvas by pressing Control-N (or Command-N).

On canvas controls

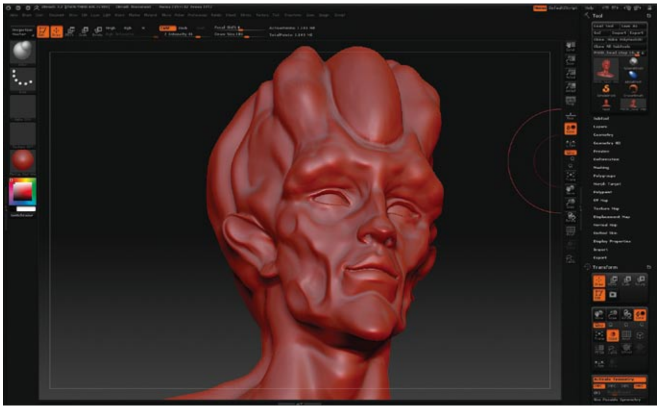
While you're working in ZBrush, you can quickly resize your brush on the canvas by pressing the s key. A pop-up slider will appear that you can drag to resize your current brush. Or, if you want access to a myriad of other tools and functions on the canvas as you work, simply hold down the Spacebar. A box will appear containing almost everything you need to work with in ZBrush: brushes, alphas, navigation controls, tool sliders, and much more.



14 Begin by painting a few vertical strokes on the forehead, near the sides of the head. Then try painting some horizontal strokes over the eyebrows to swell the brow. Then add some more vertical strokes to the side of the head, and so on. Next, try holding down the Alt (or Option) key while painting. This creates the opposite effect, resulting in recessed areas rather than raised areas. Try creating recessed regions below the cheekbones, in the temple areas, and on the neck where appropriate.



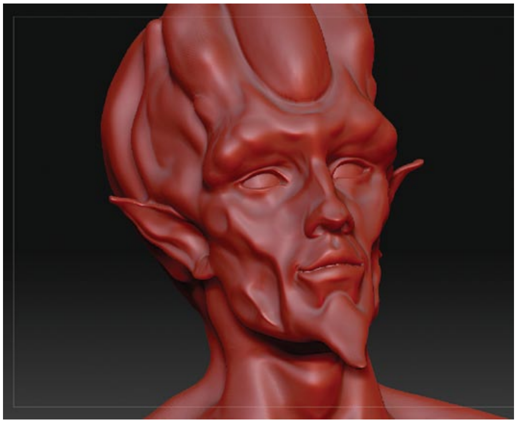
15 A couple of things that affect sculpting are Draw Size, which is essentially the brush size, and Z Intensity. Z Intensity controls how aggressively the brush behaves when displacing the mesh. The default setting is 25, which is quite aggressive. Try reducing this for a more subtle effect. Sliders for these controls are always available directly above the canvas.

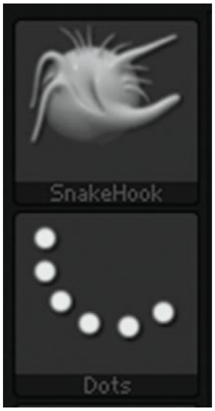


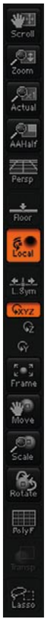
16 ZBrush has a myriad of Brush and Stroke options. Try some different brushes and also try varying the Strokes as you work with them. The first time you use ZBrush, all these options will seem a little daunting. An important thing to remember is that when you select a brush, stroke, or any tool in ZBrush, you can access a brief description of the tool and its behavior by holding down the Control (or Command) key. These descriptions are very helpful when it comes to deciding what you're going to use and how you're going to go about it. Continue to reshape the head, using large Draw Sizes and low Zintensity settings. Some of the brushes I used to get the general shape you see here were the Clay, Move, Inflate, and Standard options. To smooth the mesh a little more, press Control-D (or Command-D) once.

Smooth results

Some brushes, such as the Snake Hook or Inflate, can have quite a drastic effect, and I find that the results are best when such brushes are used with moderation. However, another thing that I've found is that the best results are achieved by using a multiple brush strategy. For instance, if I perform a Snake Hook operation, I'll modify it with the Move Brush using low Z Intensity. Then finally I'll smooth it out with the Smooth Brush at a very high Z Intensity. The general idea is to perform a task that makes a noticeable difference on the mesh, then carefully integrate it again so that it looks natural.





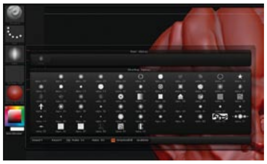


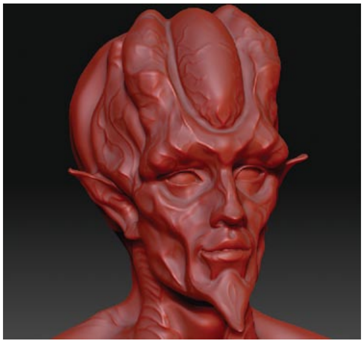
17 Try using the Snake Hook brush with a small Draw Size to pull minute sections of the mesh outward. Using the Dots or Freehand strokes works well with this tool. Do not overdo it with the Snake Hook brush or you can quickly make a mess of your mesh. Here you can see that I used the Snake Hook brush to create a pointed-ear effect and extend a point from the bottom of his chin. Remember that you can rotate your mesh as you work as well as alter its position and size on the canvas by using the buttons to the left of the tray at the right side. At the top of this stack of buttons are some very useful tools for navigating the canvas as well.

PART THREE: Putting your alphas to use

Saving your tool

After spending some time sculpting the initial tool, it will become something else entirely. To access this tool at a later date, you'll need to save it. If you simply save the document in ZBrush, the tool is dropped to the canvas and not saved as an actual tool. Upon saving, you can decide whether to save the tool or the document, or you can click the Save As button in the Tool palette.

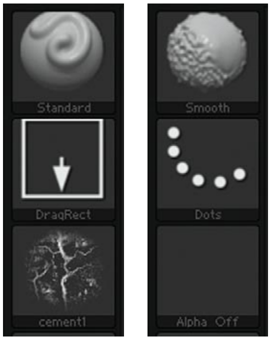


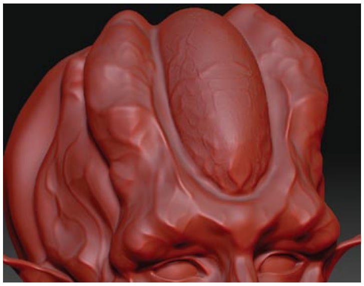


18 Now that the head is deformed into something completely different, it is time to add some interesting surface details by integrating the alphas you created previously into the ZBrush sculpting process. First, choose the Standard Brush and the Dots Stroke. Click the Alpha button beneath the Stroke button and, when the floating palette of Alphas appears, click the Import button in the bottom-left corner and then navigate to the *bump.psd* file you created previously. Once you load the file, it will appear in the list of user alphas in the Alphas palette. Select this alpha and then paint a few strokes on your model. Adjust Z Intensity and Draw Size as required. Gently build up some things that resemble veins as well as create some sharper ridges on existing raised areas. Press Control-D (or Command-D) to subdivide the mesh again.

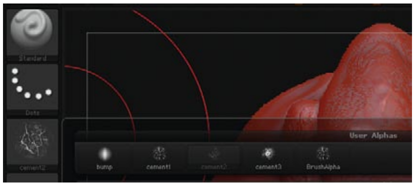
Standard VS Displace

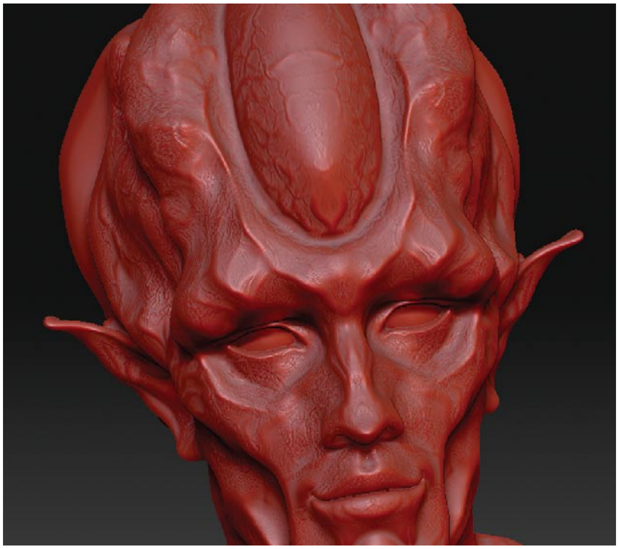
You'll notice that I have you performing displacements with the Standard brush here, which works fine for this purpose. However, when pushing the mesh, the Standard Brush favors the screen orientation. If you are a 3D purist, you might want to consider using the Displace brush instead. The main difference is that the Displace brush will push the mesh according to the direction of the actual surface, helping preserve the underlying detail. For what we're doing here, the difference is negligible, so it's your call.



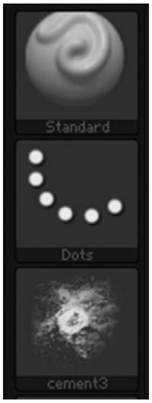


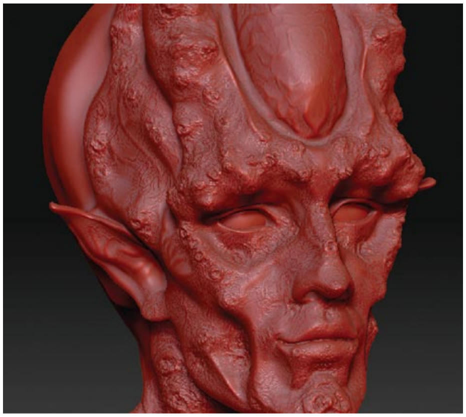
19 Load the *cement1.psd* as an alpha using the method mentioned previously. Then select the DragRect stroke. Click and drag the central orb of the head a couple of times using a Z Intensity of around 10 or so. The DragRect is different from the Freehand or Dots strokes in that it places the alpha once each time you click and drag, with the size determined by the distance of your drag. To blend in this effect a little, choose the Smooth Brush and the Dots Stroke. Set the Z Intensity to something quite low, around 10 or 12. Then gently paint over the raised regions you just created to soften them a little.





20 Load the remaining alphas that you created previously using the aforementioned method. Select the Standard Brush and the Dots stroke. Select the *cement2.psd* alpha and set the Z Intensity to 10. Use a rather large Draw Size and then paint short strokes over the surface of the mesh to add a gentle distress to areas of the creature's skin. Remember that you can also carve into the surface by holding down the Alt (or Option) key as you paint.





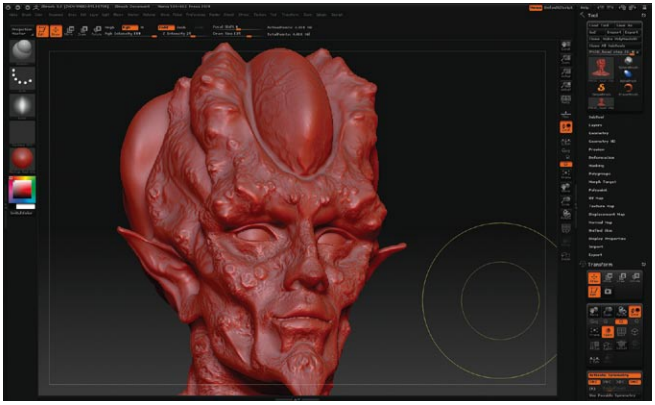
21 Keep the brush set to Standard and the stroke set to Dots, but now select the cement3 alpha. Because this alpha has a large, prominent white lump in the center, it is ideally suited to creating discernable masses on the surface of the mesh. It will create bulbous, round extrusions, so paint very short strokes over areas such as ridges or sharp, raised points that already exist on the mesh. Use varying Draw Sizes and a Z Intensity of around 25 to make prominent details on the mesh.

Does yours look different?

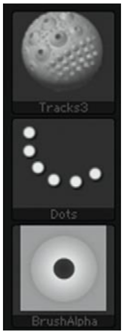
I can appreciate that as a Photoshop user you might find the process of sculpting in ZBrush quite challenging. There is a strong possibility that at this point you're getting very frustrated because your mesh doesn't really match up to the one shown here. Worry not; you can follow along with my mesh if you like. You can load my mesh just as you loaded the initial Head tool earlier in the chapter. My mesh is included with the downloadable project files and is called *headsculpt.ZTL*. Remember to drop your current mesh to the canvas by *un*clicking

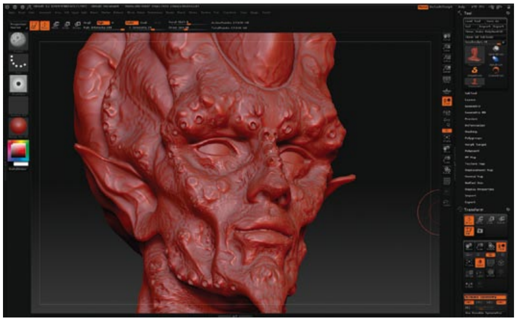
The Shift key

While you're working with the Standard brush, the Displace brush, or any 3D sculpting brush for that matter, you can quickly switch to the Smooth brush by holding down the Shift key as you work. Switching back to your previous brush is as simple as letting go of the Shift key.



22 Select the Smooth brush and choose either the Freehand or the Dots stroke. Click the Alpha button and choose the Alpha Off option. Then, with varying Z Intensity and varying Draw Sizes, paint short, light strokes over areas that appear too coarse or sharp. This will ensure that they blend nicely into the surface. Have some fun experimenting with other brushes. Try using the Magnify brush with the Dots stroke and your Bump alpha. This will help to swell bulbous areas out from the mesh surface. Using a large Draw Size is perfect for regions like the orb on his forehead or the smooth area at the back of the head.

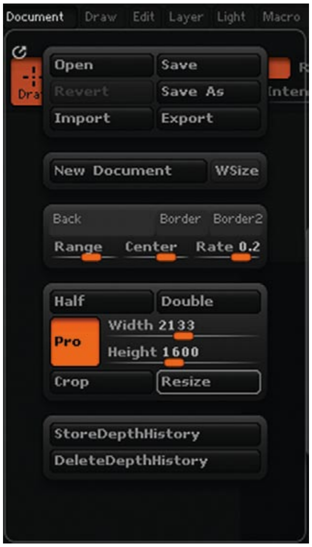


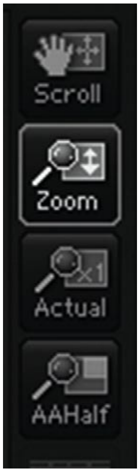


A mouse won't cut it

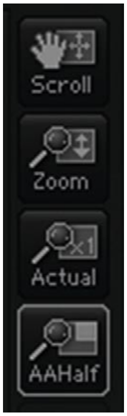
Although it is theoretically possible to use a mouse to sculpt in ZBrush, it is nearly impossible to achieve the same result that comes from using a pressure-sensitive tablet. Your tablet doesn't need to be anything fancy or impressive. For this chapter I used a little Wacom Bamboo tablet; the sense of control and flawless interactivity that it provides is essential to the sculpting process. Simply put, if you're using a mouse, your sculpting won't be as refined as what you see here.

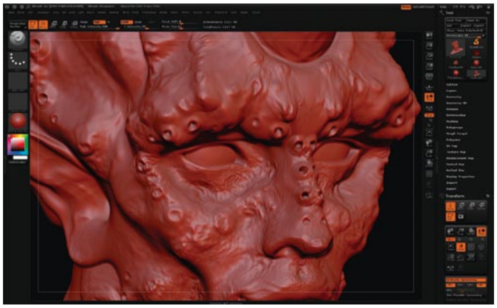
23 Feel free to continue in this manner until you're satisfied with the surface texture and sculpted regions of the head. Now let's try one last brush. Select the Tracks3 brush. You'll notice that when you select this brush, the stroke is set to Dots and a default alpha is already selected. As you click and drag with this tool, you'll notice that tracks are deposited in the stroke. The alpha that is used results in an effect similar to the underside of an octopus tentacle. Add a few of these tracks, but not too many; it can quickly become overwhelming. Be certain to vary the Draw Size and Z Intensity along the way. When you're finished, press Control-D (or Command-D) to subdivide the mesh one last time. Use the Smooth brush as you did previously to soften any areas that appear too sharp.


Document
Draw
Edit
Layer
Light
Macro
Open
Save
Revert
Save As
Import
Export
New Document
WSize
Back
Border
Border2
Range
Center
Rate 0.2
Half
Double
Pro
Width 2133
Height 1600
Crop
Resize
StoreDepthHistory
DeleteDepthHistory


Scroll
Zoom
Actual
AAHalf

24 Deactivate the Edit button so that your tool is dropped to the canvas. Then press Control-N (or Command-N) to clear the canvas. Don't fret; your tool is not gone forever, it is still there in the Tool palette. If you're using your own tool, go ahead and select it in the Tool palette. If you're using the tool included with the downloadable project files, go ahead and load it. Click the Load Tool button in the Tool palette and navigate to the *headsculpt.ZTL* file to load it. The newly loaded tool will be the active tool. Click the Document button at the top of the interface to view the Document palette. Drag the Height slider to the right until the height reaches 1600 pixels; the Width will self-adjust proportionately. Then click Resize to change the size of the canvas. You'll need to click and drag upward a number of times on the Zoom button to zoom out and bring the entire canvas back into view.


Scroll
Zoom
Actual
AAHalf

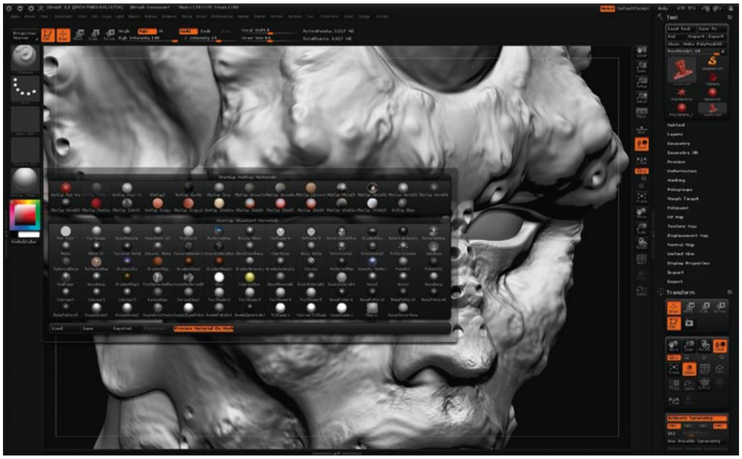


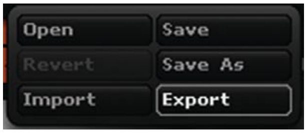
25 Your tool is already selected, so clicking and dragging the canvas will add the a new mesh to the canvas. Before you do anything else, enable the Edit button by clicking it. Then use the Move, Scale, and Rotate buttons to get your mesh looking exactly the way you want it on the canvas. When you're satisfied with everything, click the AAHalf button just below the Scroll, Zoom, and Actual buttons for navigating and viewing the canvas. Immediately, the screen will change considerably. Your display might not look exactly like what you see here, but the effect will be the same. Do not scale or rotate the mesh or mess with the Zoom button; the canvas is simply scaled down by 50%, and any areas that extend beyond the viewable area are still there. Just sit tight for a moment and leave things as they are.

The AAHalf button

Pressing the AAHalf button in ZBrush will display your document at exactly half its size. When this AAHalf is enabled, ZBrush will antialias the image, smoothing any jagged edges. When you export an image with AAHalf enabled, it is reduced to half the size of the original. However, when you know that AAHalf will be employed at the export stage, before you begin you can simply create a document that is twice the size of what you require.

PART FOUR: Changing materials and exporting images

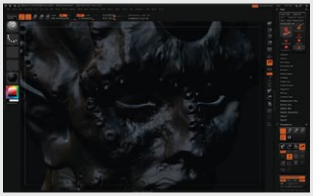


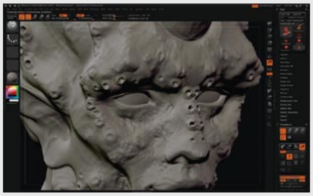


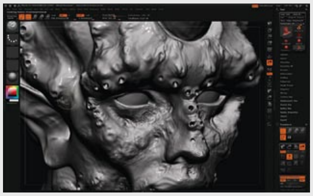
26 Click the Document button once again to reveal the Document palette. In the Document palette, click the Export button to export the canvas as an image file. Name the file Head Red and ensure that you export as a .psd file. We included the word *red* in the filename to refer to the material applied. We haven't talked about materials until now because we've been busy sculpting; the MatCap Red Wax material is the default material when you're working in ZBrush. Because we'll be compositing these images in Photoshop later, we want to have a number of duplicate images that employ different materials each time. Click the Material button to reveal all the included materials. Now select the MatCap White Cavity material. Export an image file after changing the material and name it White Cavity.psd.

Exporting a variety of resources

Creating a number of images with varying materials is as easy as simply changing a single variable and exporting repeatedly.



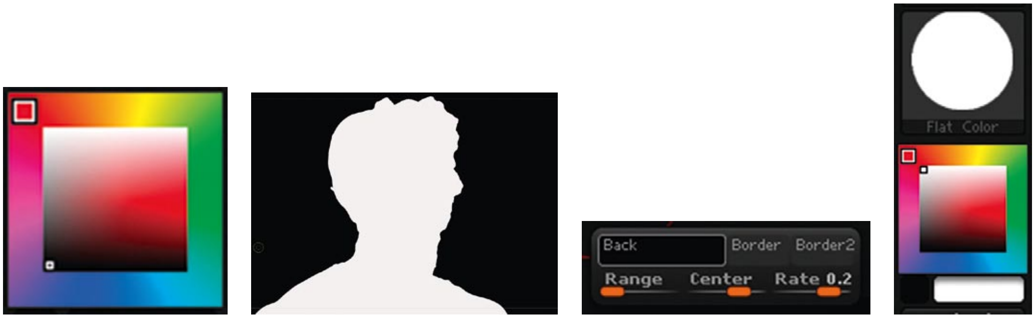




1 Now change the material to MatCap Pearl Cavity and export the image as a .psd named Head Pearl.psd. Next, select the MatCap Gorilla material and then export the image as Head Gorilla.psd.

2 Choose MatCap WedClay01 next, then export the image as Head Clay.psd. After that, choose the MatCap GreenRoma material and then export the image as Head Roma.psd.

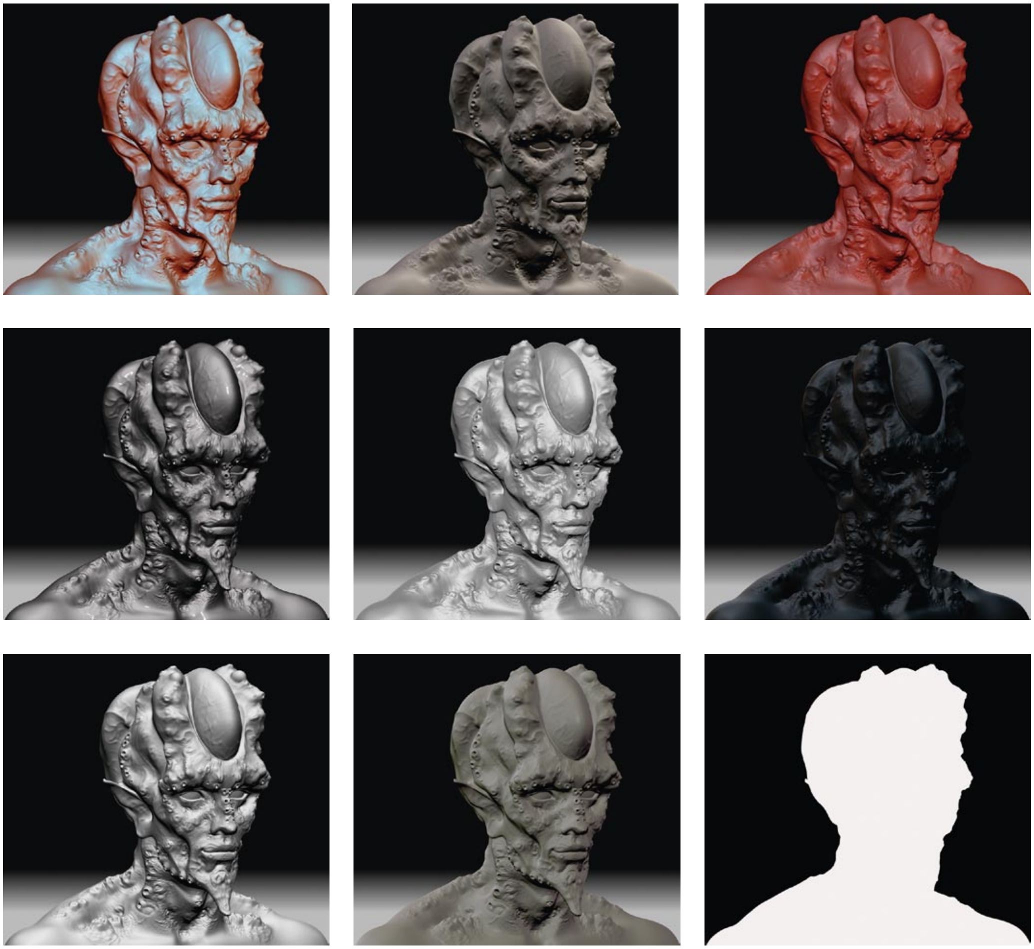
3 For the next one, choose MatCap Skin004. Export the image as Head Skin.psd. Finally, for the last material, choose BasicMaterial2 and export the image as Head Basic.psd.



27 Zoom out a little by clicking and dragging upward on the Zoom button until you can see the entire canvas. At this point we'll create an image that we can place in an alpha channel, which will eventually become a selection in Photoshop. This will save us time isolating each figure from the background as we composite the images across a stack of layers. In the Document palette, set the Range to 0. Then select a black color from the color box at the left. After doing that, go back to the Document palette and click the Back button. This turns the entire background black. Select the Flat Color material and then select a white color from the color box to make the mesh appear as solid white against the black background. To export the image so that it lines up with the rest, you must first click the AAHalf button. Then export the image and save it as Head Channel.psd.

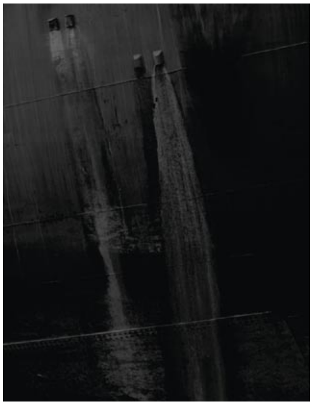
PART FIVE: Building the composition in Photoshop

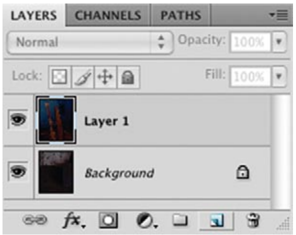
28 Quit Zbrush and don't bother saving changes to the document when prompted. It doesn't really matter because we've saved the tool, and saving the document drops the mesh to the canvas anyway; so even if we did open the document later, the mesh wouldn't be editable in its current position on the canvas. Open the *background.jpg* file in Photoshop. This simple photograph will act as the initial backdrop for our figure. However, things are going to change considerably, and this simple image will form the basis for an immersive and textural environment for our creature to inhabit within the finished illustration.



Here's a look at all the AAHalf rendered images that were exported from ZBrush. The first eight offer abundant variety due to the diverse materials that were applied to the mesh, whereas the last image will be used to create a common selection border. Some offer sharp highlights, some flat surfaces, some darker or lighter values overall, and some offer differences in terms of shadows. The important thing to note at this point is that diversity is a great asset for what we're going to do next. Each image will be used on layers, with blending modes chosen specifically to enhance unique traits. As the composition begins to build up across a multitude of layers, all the blending modes will work together to create something entirely new from the diverse individual components.

PART SIX: Create a textured background

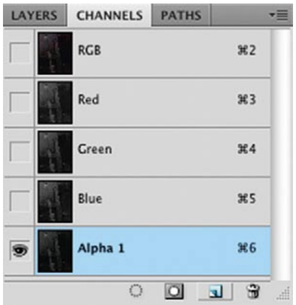




Normal, Opacity: 100%, Fill: 100%

Layer 1

Background



RGB ⌘2

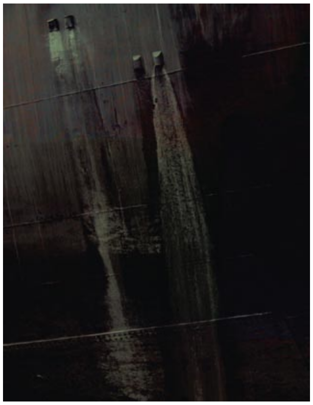
Red ⌘3

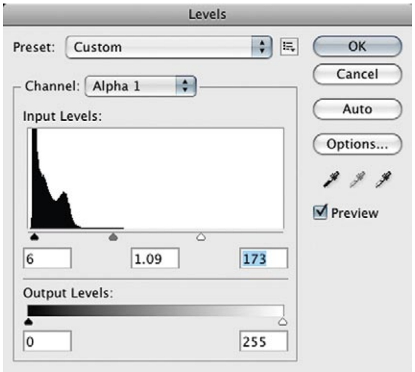
Green ⌘4

Blue ⌘5

Alpha 1 ⌘6

29 Open the *rusty.jpg* file. Use the Move tool to click the image and then drag it into the *background.jpg* file while holding down the Shift key. Holding down the Shift key will ensure accurate positioning and is something you'll need to keep on top of when I mention it as we progress through the chapter. The file will be added to the *background.jpg* file as a new layer. Change the blending mode to Luminosity. With the newly pasted layer targeted in the Layers palette, press Control-A (or Command-A) to select the contents of the entire layer and then press Control-C (or Command-C) to copy it. At the bottom of the Channels palette, click the Create New Channel button. Target the new channel in the Channels palette and press Control-V (or Command-V) to paste the copied image into the channel.



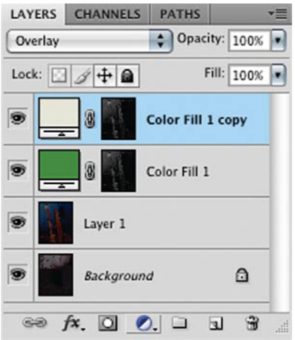


Preset: Custom

Channel: Alpha 1

Input Levels: 6 1.09 173

Output Levels: 0 255



Overlay, Opacity: 100%, Fill: 100%

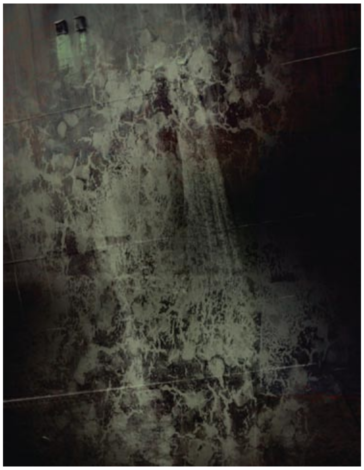
Color Fill 1 copy

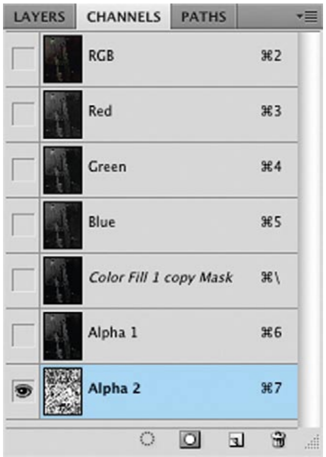
Color Fill 1

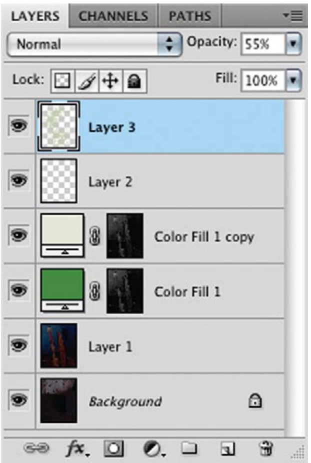
Layer 1

Background

30 Press Control-L (or Command-L) to perform a Levels adjustment within the channel. Drag the Input Levels sliders to enhance the contrast as shown here. Control-click (or Command-click) the Channel thumbnail to load it as a selection and then return to the Layers palette. With the top layer targeted and the current selection active, create a new solid color layer by choosing the Solid Color option from the Create New Fill or Adjustment Layer menu at the bottom of the Layers palette. When the picker appears, choose a medium green color and click OK. Your new solid color layer will be automatically masked by the active selection. Change the blending mode of the layer to Overlay. Drag the solid color layer onto the Create New Layer button to duplicate it. Then, double-click the duplicate layer's thumbnail to access the picker. This time, choose a lighter green color and click OK.

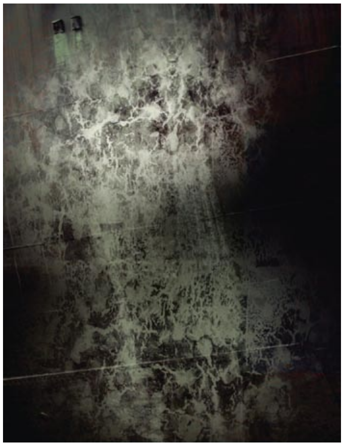


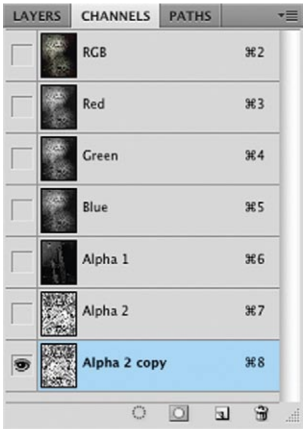

LAYERS
CHANNELS
PATHS
RGB ⌘2
Red ⌘3
Green ⌘4
Blue ⌘5
Color Fill 1 copy Mask ⌘\
Alpha 1 ⌘6
Alpha 2 ⌘7

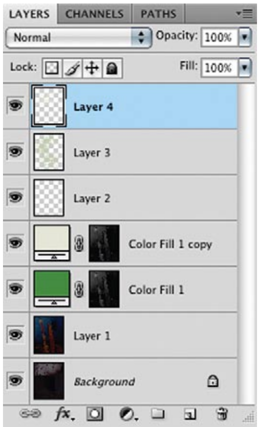

LAYERS
CHANNELS
PATHS
Lock:
Layer 3
Layer 2
Color Fill 1 copy
Color Fill 1
Layer 1
Background

Normal Opacity: 55% Fill: 100%

31 Open the *glass.jpg* file. Select all and copy. Create another new alpha channel in your working file and paste the copied glass image into it. Load the channel as a selection by Control-clicking (or Command-clicking) the channel's thumbnail. With the new selection active, click the Create A New Layer button at the bottom of the Layers palette to create a new layer at the top of the stack. Select the Gradient tool and choose the Foreground to Transparent gradient preset from the Gradient picker in the Tool Options bar. Select the Radial method and set the opacity to 100 in the Tool Options bar as well. Next, click the foreground color swatch to access the picker. Select a light green color and click OK. Click and drag within the active selection on the new layer to create a few large gradients on the new layer. Press Control-D (or Command-D) to deactivate the selection. Reduce the opacity of the layer if necessary.



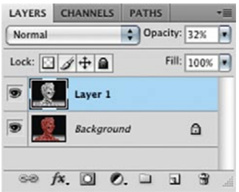

LAYERS
CHANNELS
PATHS
RGB ⌘2
Red ⌘3
Green ⌘4
Blue ⌘5
Alpha 1 ⌘6
Alpha 2 ⌘7
Alpha 2 copy ⌘8


LAYERS
CHANNELS
PATHS
Lock:
Layer 4
Layer 3
Layer 2
Color Fill 1 copy
Color Fill 1
Layer 1
Background

Normal Opacity: 100% Fill: 100%

32 Go back to the Channels palette and drag the newest alpha channel onto the Create New Channel button to duplicate it. With the duplicate channel targeted, select Edit > Transform > Flip Horizontal from the menu. After flipping the channel, load it as a selection. With the selection active, create a new layer in the Layers palette. Ensure that you still have the Gradient tool selected with the previous preset and options in place. Choose a lighter green color from the picker and then create a few gradients within the selection on the new layer in the upper-left region of the canvas. When you're satisfied, deactivate the selection.

PART SEVEN: Stack up the exported images

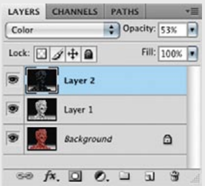


Normal
Opacity: 32%
Fill: 100%
Layer 1
Background

33 Keep your working file open for the time being. We're going to abandon it for the next procedure. However, we'll return to it shortly. In any case, now is a good time to save what you've done so far. After saving your working file, open all the .psd files that you exported from ZBrush. If you skipped the part about working with ZBrush earlier in this chapter, these files are included among the downloadable project files. Begin with the *Head Red.psd* file; we'll use this image as the base of the stack, and this file will act as our head working file. Next, find the *Head Pearl.psd* file. Use the Move tool to click the Head Pearl image and drag it into the *Head Red.psd* while holding down the Shift key. Reduce the opacity of the new layer to 32%.

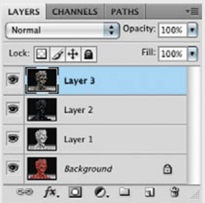
Continue building

Just keep dragging in different image files, varying the way they blend.



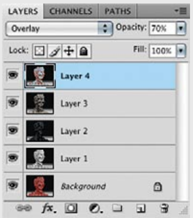
Color
Opacity: 53%
Fill: 100%
Layer 2
Layer 1
Background

1 Now drag the image from the *Head Gorilla.psd* file into the head working file while holding down the Shift key. Change the layer blending mode to Color and reduce the opacity to 53%.



Normal
Opacity: 100%
Fill: 100%
Layer 3
Layer 2
Layer 1
Background

2 Again, Shift-drag the *Head Clay.psd* image file from its original file into the head working file as a new layer. Change the blending mode to Luminosity and reduce the opacity to 70%.

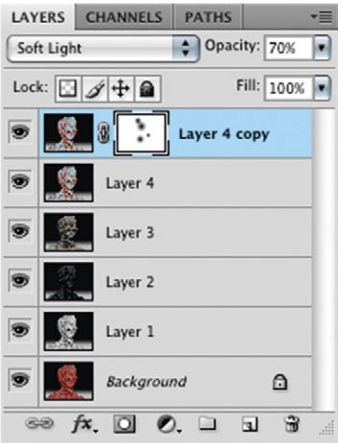


Overlay
Opacity: 70%
Fill: 100%
Layer 4
Layer 3
Layer 2
Layer 1
Background

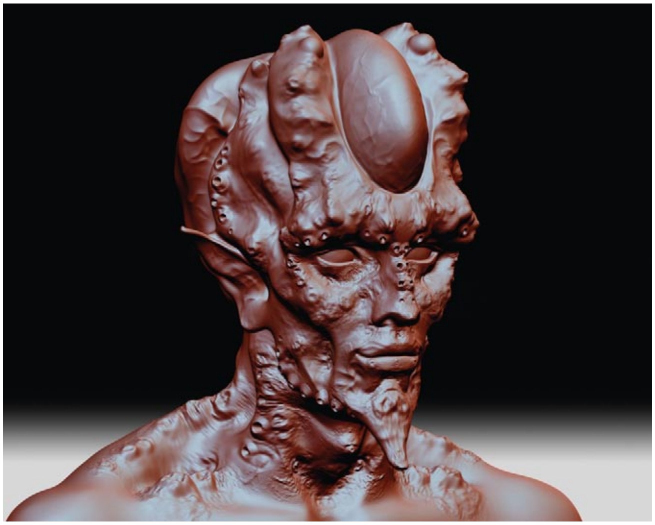
3 Next, drag the *Head Skin.psd* image into the head working file while holding down the Shift key. Change the blending mode to Overlay and reduce the opacity of the layer to 70% as well.

Viewing a mask

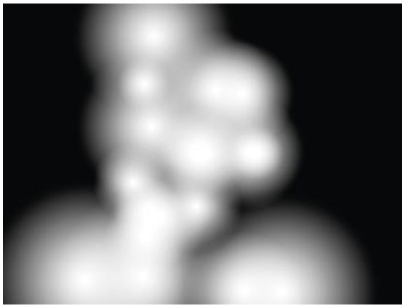
If you want to view any layer mask as a grayscale image on the canvas, simply Alt-click (or Option-click) the Mask thumbnail in the Layers palette. When you're finished viewing it and you want to see your image on the canvas once again, simply Alt-click (or Option-click) it again to hide it.

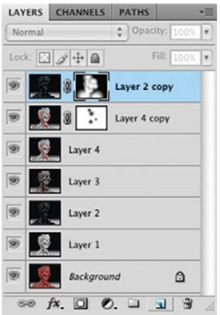


Soft Light
Opacity: 70%
Fill: 100%



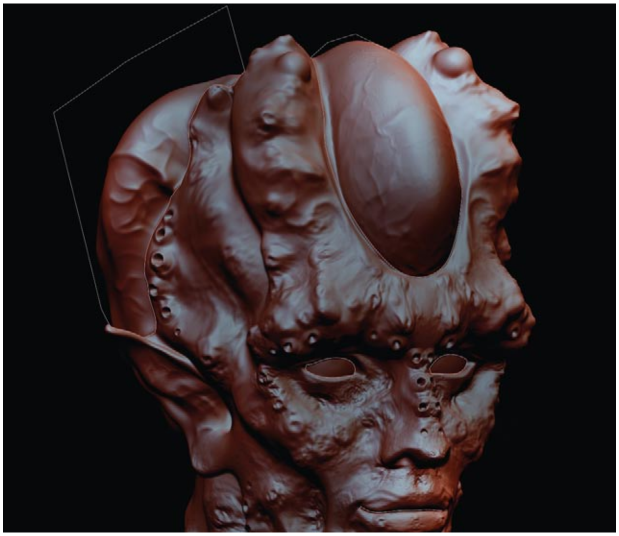
34 Duplicate the top layer and change the blending mode to Soft Light. Click the Add Layer Mask button at the bottom of the Layers palette to mask the duplicate layer and then target the new mask. Select the Gradient tool and select the Foreground to Transparent method in the Tool Options bar. Select the Radial method in the Tool Options bar as well and then press the x key to set the current foreground color to black. Click and drag within the mask to create few Black to Transparent Radial gradients. Create the gradients over the areas of his horn-like protrusion in the foreground as well as his raised cheek areas to lessen the shiny effect in those regions.

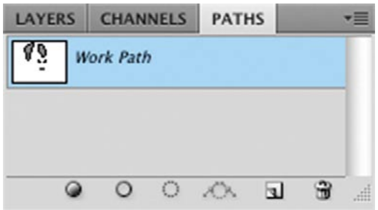




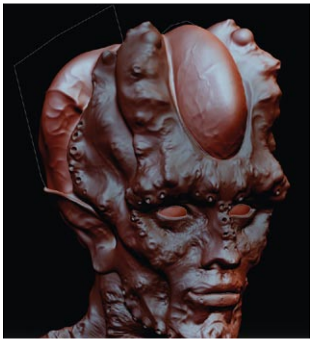
Normal
Opacity: 100%
Fill: 100%

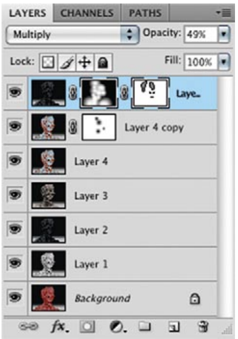
35 Duplicate Layer 2, which contains the *Head gorilla.psd* image, and then drag the duplicate to the top of the stack in the Layers palette. Change the blending mode of the layer to Multiply and reduce the opacity to 49%. Choose Layer > Layer Mask > Hide All to mask the layer, hiding it entirely for now. Select the Gradient tool and ensure that the mask is targeted in the Layers palette. Use the same Gradient tool settings you used previously, and if the foreground color is not currently white, press the D key. Create a series of White to Transparent, Radial gradients that cover most of the figure except for his chin, nose, lips, and horn at the right of the canvas. Here's a preview of how the mask looks at this stage.





36 Select the Pen tool and ensure that it is set to create paths in the Tool Options bar and that the Subtract From Path Area operation is enabled. Carefully draw a path component that outlines a single eye, returning to your first point to close the path component. Then draw another around his other eye. Draw another around his teeth and yet another around the orb in his forehead. Finally, draw one carefully between the fleshy area at the back of his head and the raised region above his ear. For the rest of this path component, you can stray out onto the background; it won't matter later on. Control-click (or Command-click) anywhere on the canvas where there is no path component. This will temporarily change the Pen tool to the Direct Selection tool, and clicking will ensure that no single Path component is selected.



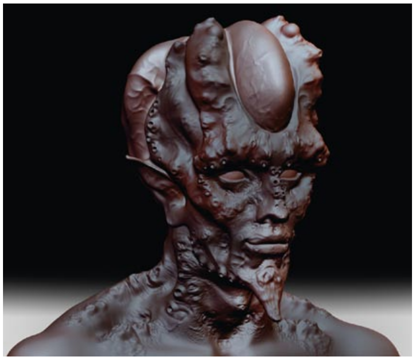


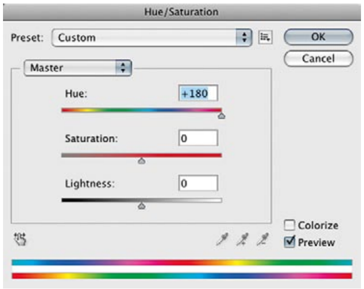
Multiply
Opacity: 49%
Fill: 100%

37 Ensure that the path itself is targeted in the Paths palette, yet no single path component within the path is selected. If the path is targeted, it will remain visible on the canvas. Return to the Layers palette and the top layer should still be targeted. If for any reason it is not, click it in the Layers palette. Once you're sure it is targeted, click the Add Vector Mask button at the bottom of the Layers palette. This will add a vector mask to the already masked layer, making use of the current path and hiding the regions of the layer that reside within your closed path components.

Which mask am I adding?

When you target an unmasked layer and click the Add Layer Mask button at the bottom of the palette, it will automatically add a standard layer mask. However, if your layer already has a layer mask applied to it, this button then becomes the Add Vector Mask button. Clicking the Add Vector Mask button will, as it clearly states, add a vector mask to your layer. Now you can add a vector mask using this button without having a standard layer mask already applied to the layer. Simply hold down Control+Alt (or





Hue/Saturation

Preset: Custom

Master

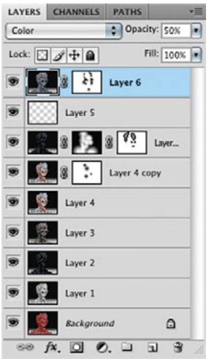
Hue: +180

Saturation: 0

Lightness: 0

☐ Colorize

☑ Preview

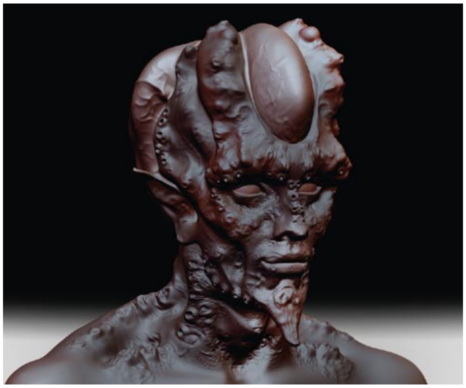


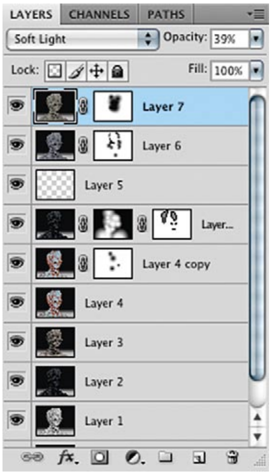
Color Opacity: 50%

Fill: 100%

LAYERS
CHANNELS
PATHS
Lock:
Layer 6
Layer 5
Layer...
Layer 4 copy
Layer 4
Layer 3
Layer 2
Layer 1
Background

38 Now drag the *Head Roma.psd* into the head working file as a new layer. Remember to hold down the Shift key as you drag it with the Move tool. Press Control-U (or Command-U) to make a Hue/Saturation adjustment to this layer's contents. Drag the Hue slider to 180 and click OK. Change the blending mode of the layer to Color and reduce the opacity to 50%. Add a layer mask and then use the Gradient tool within the mask to hide certain regions of the layer. Create some Black to Transparent, Radial gradients within the mask over his cheeks, chin, and horn-like ridges.

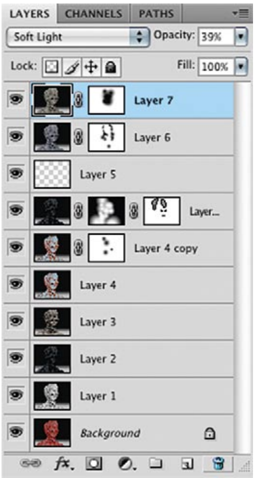




Soft Light Opacity: 39%

Fill: 100%

LAYERS
CHANNELS
PATHS
Lock:
Layer 7
Layer 6
Layer 5
Layer...
Layer 4 copy
Layer 4
Layer 3
Layer 2
Layer 1

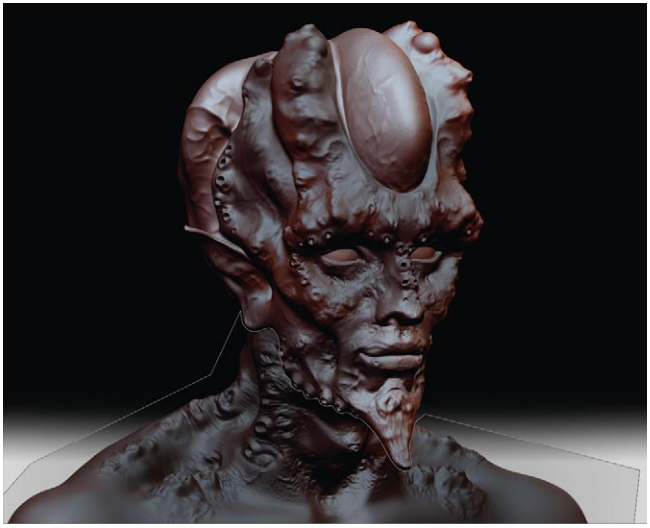


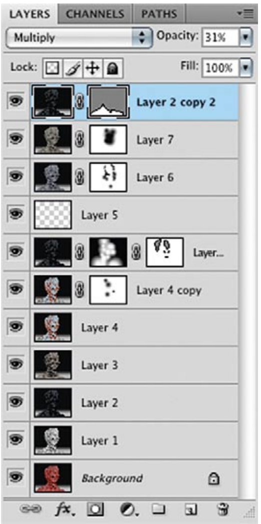
Soft Light Opacity: 39%

Fill: 100%

LAYERS
CHANNELS
PATHS
Lock:
Layer 7
Layer 6
Layer 5
Layer...
Layer 4 copy
Layer 4
Layer 3
Layer 2
Layer 1
Background

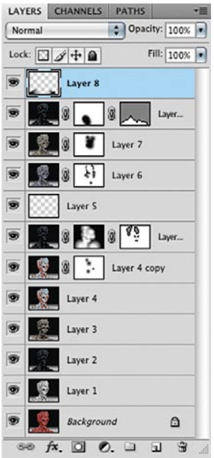
39 Drag another instance of the *Head Roma.psd* into the head working file as a new layer while holding down the Shift key. This time do not bother altering the hue of the layer. Change the blending mode to Soft Light and then reduce the opacity to 39%. Add a layer mask and use the methods employed previously to create a series of Black to Transparent, Radial gradients within the mask, focusing on the lower region of the orb and his nose. When you're finished, target the layer and not the mask in the Layers palette. Select all and copy. Then click the Create New Channel button in the Channels palette and paste the copied art into the new channel. After pasting, press Control-D (or Command-D) to deactivate the selection and then return to the Layers palette. Don't worry, we'll return to this new channel soon enough.




LAYERS
CHANNELS
PATHS
Lock:
Layer 2 copy 2
Layer 7
Layer 6
Layer 5
Layer...
Layer 4 copy
Layer 4
Layer 3
Layer 2
Layer 1
Background

Multiply Opacity: 31% Fill: 100%

40 Make another duplicate of Layer 2—the layer that contains the *Head Gorilla.psd* artwork. Drag the duplicate layer to the top of the stack in the Layers palette and change the blending mode to Multiply. Reduce the opacity of the layer to 21% and select the Pen tool. Ensure that it is set to create paths and enable the Add to Path Area operation in the Tool Options bar. Carefully draw a closed path that meticulously traces the line between the figure's jawline and lower ear, dividing that area from the neck and shoulders. Then continue to draw the lower part of the path, covering the neck and shoulders and closing the path. Ensure that this path is targeted in the Paths palette and then Control+Alt-click (or Command+Option-click) the Add Layer Mask button to add a vector mask to the layer using the currently selected path.

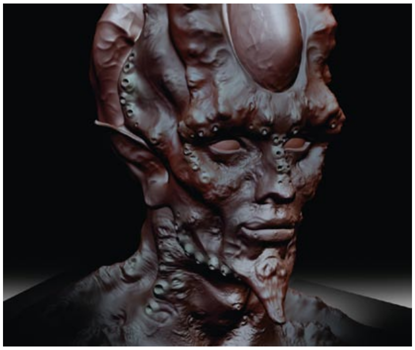

LAYERS
CHANNELS
PATHS
Lock:
Layer 8
Layer...
Layer 7
Layer 6
Layer 5
Layer...
Layer 4 copy
Layer 4
Layer 3
Layer 2
Layer 1
Background

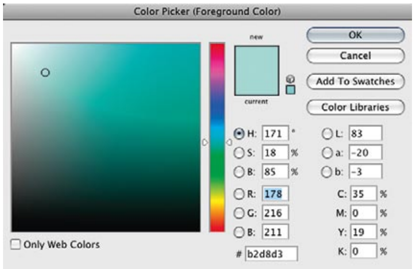
Normal Opacity: 100% Fill: 100%

41 Now click the Add Layer Mask button again to add a standard layer mask. Ensure that the mask is targeted in the Layers palette and select the Gradient tool. Use the same methods as before to create some Black to Transparent, Radial gradients within the mask. Concentrate on his neck area. Hold down the Control (or Command) key and click the Vector Mask thumbnail in the Layers palette to generate a selection from the layer mask. With the selection active, create a new layer and press the D key to set the foreground color to black. Then create some Radial, Black to Transparent gradients within this selection on the new layer. Concentrate on darkening his shoulders.

Hide/show the selection

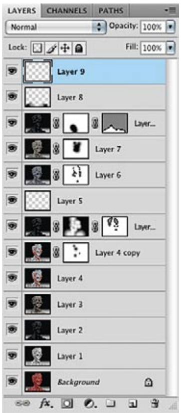
If you find that the selection border is in your way as you're working, simply press Control-H (or Command-H) to hide it. It will still be there, but the marching ants will disappear. Typing the same keyboard command will make it reappear as well. This is one of those things I do so often that it feels like second nature as I work. I don't even think about it. I find that hiding the selection border allows me to better focus on the image.





Color Picker (Foreground Color)
new
current
OK
Cancel
Add To Swatches
Color Libraries

● H: 171 °
○ S: 18 %
○ B: 85 %
○ R: 178
○ G: 216
○ B: 211
○ L: 83
○ a: -20
○ b: -3
C: 35 %
M: 0 %
Y: 19 %
K: 0 %
# b2d8d3
☐ Only Web Colors

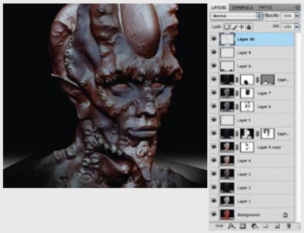


LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 9
Layer 8
Layer...
Layer 7
Layer 6
Layer 5
Layer...
Layer 4 copy
Layer 4
Layer 3
Layer 2
Layer 1
Background

42 In the Channels palette, Control-click (or Command-click) the alpha channel you created previously to load it as a selection. Then create a new layer at the top of the stack in the Layers palette. With your new layer targeted, select the Brush tool and select a soft, round brush preset. Click the foreground swatch in the Toolbar to access the picker. Choose a very light greenish-blue color from the picker and click OK. Use varying sizes and also vary the brush opacity between 20% and 50% as you paint within the selection on the new layer. Focus on adding the light green color into areas such as the suction cups and other raised details of his face. Be careful not to overdo it.

Continue painting

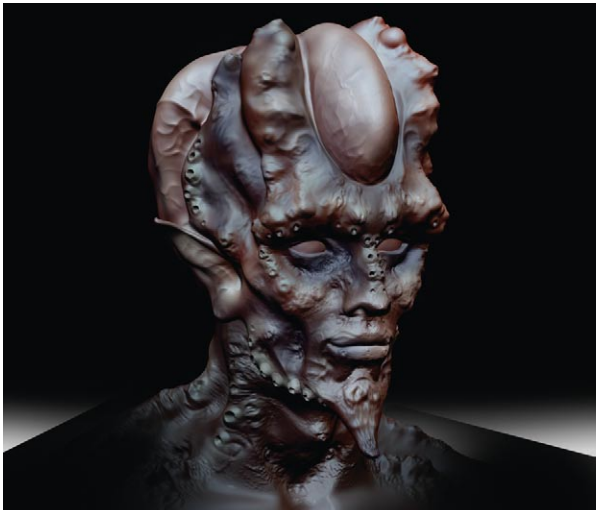
Build up effects by painting within the same selection while varying color and layer blending methods.

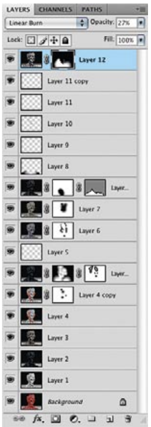


1 Keep the current selection active and create a new layer. Select a bluish-purple color from the picker and use the same brush to paint within the selection on the new layer. Set the opacity to 50% and build up strokes under his eyes, around his lips, and in the recessed areas of his cheeks and temples.

2 Change the blending mode to Color and then create another new layer while the current selection remains active. Ensure that the new layer is targeted, and select a very light green foreground color from the picker. Begin to paint over some of the raised areas of his face with the current brush settings. Also work on other regions, such as the inside of his ear.

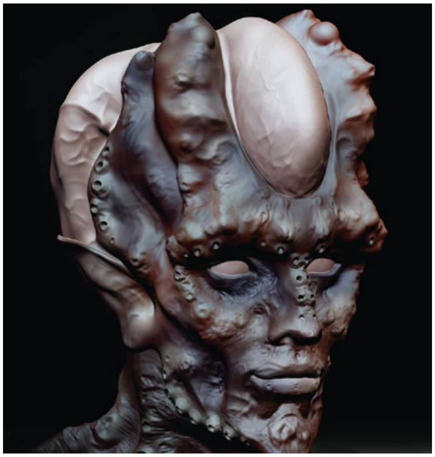
3 Continue to paint in regions that require lightening. Remember to vary brush size and opacity as necessary. To enhance the effect of this layer, change the blending mode to screen and duplicate it. Reduce the opacity of the duplicate layer to 20% so that the effect is not overwhelming, and press Control-D (or Command-D) to deactivate the selection.

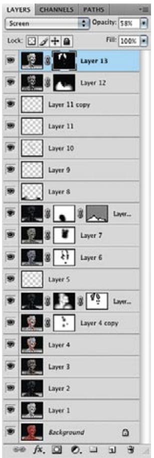



LAYERS
CHANNELS
PATHS
Lock:
Layer 12
Layer 11 copy
Layer 11
Layer 10
Layer 9
Layer 8
Layer...
Layer 7
Layer 6
Layer 5
Layer...
Layer 4 copy
Layer 4
Layer 3
Layer 2
Layer 1
Background

Linear Burn
Opacity: 27%
Fill: 100%

43 Use the Move tool to drag the *Head Basic.psd* image into the working file as a new layer while holding down the Shift key to ensure proper positioning. Change the layer's blending mode to Linear Burn and then reduce the opacity of the layer to 27%. Add a mask to the layer and use Radial, Black to Transparent gradients to mask almost all the layer content except for the area that covers his shoulders.



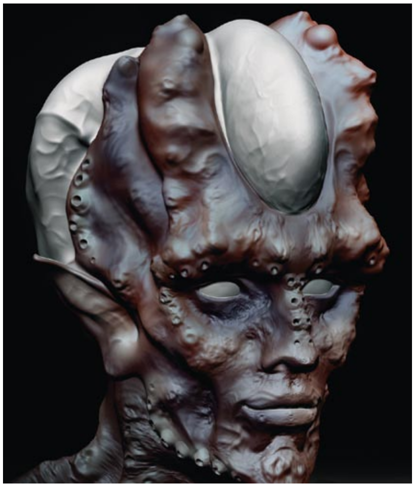

LAYERS
CHANNELS
PATHS
Lock:
Layer 13
Layer 12
Layer 11 copy
Layer 11
Layer 10
Layer 9
Layer 8
Layer...
Layer 7
Layer 6
Layer 5
Layer...
Layer 4 copy
Layer 4
Layer 3
Layer 2
Layer 1
Background

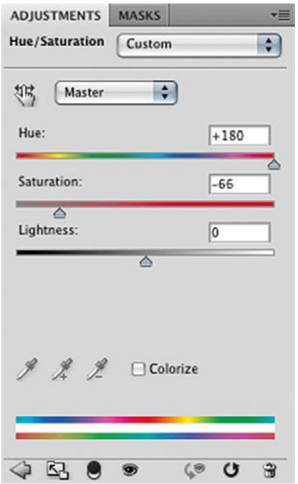
Screen
Opacity: 58%
Fill: 100%

44 Next, use the Move tool to Shift-drag the *Head Cavity.psd* image into the head working file as a new layer. Change the blending mode of the layer to Screen and then reduce the opacity to 58%. Ensure that this new layer remains targeted while you Control-click (or Command-click) the Layer 2 copy layer's Vector Mask thumbnail to load it as a selection. Invert the selection by pressing Control-Shift-I (or Command-Shift-I). After the selection is inverted, click the Add Layer Mask button at the bottom of the Layers palette. This will mask all the areas on the layer that lie outside the selection border.

Can't find Layer 2 copy?

You might have named your layer something different, and that is fine. You can easily find the layer referred to here because it contains the head with the gorilla material applied to it and it is the first layer to which you applied a vector mask.





ADJUSTMENTS
MASKS

Hue/Saturation: Custom

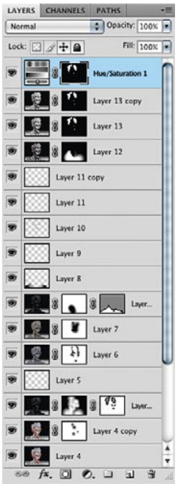
Master

Hue: +180

Saturation: -66

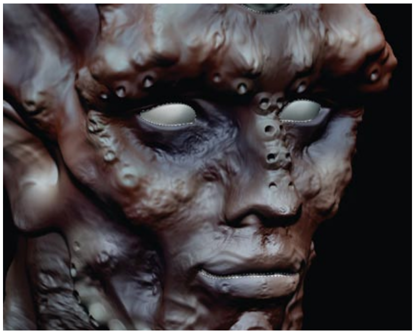
Lightness: 0

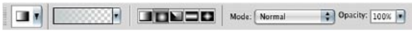
☐ Colorize



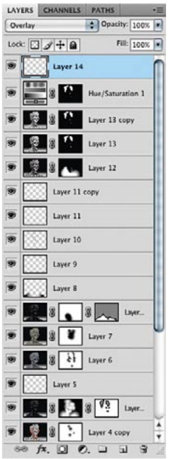
LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Hue/Saturation 1
Layer 13 copy
Layer 13
Layer 12
Layer 11 copy
Layer 11
Layer 10
Layer 9
Layer 8
Layer...
Layer 7
Layer 6
Layer 5
Layer...
Layer 4 copy
Layer 4

45 Duplicate the layer and change the blending mode to Overlay. Reduce the opacity of the duplicate layer to 23%. Control-click (or Command-click) the duplicate layer's Mask thumbnail in the Layers palette to load it as a selection. While the selection is active, choose the Hue/Saturation option from the Create New Fill or Adjustment Layer menu at the bottom of the Layers palette. In the Adjustments palette, adjust the hue to +180 and decrease the saturation by 66.





Mode: Normal Opacity: 100%

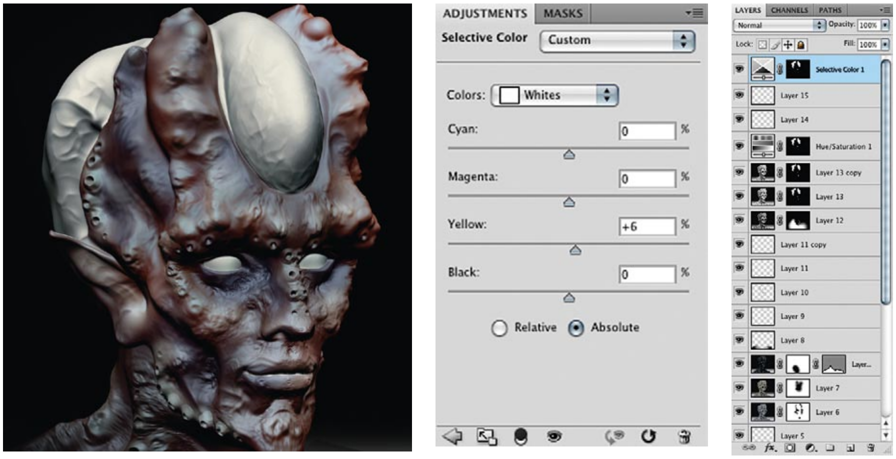


LAYERS
CHANNELS
PATHS
Overlay
Opacity: 100%
Lock:
Fill: 100%
Layer 14
Hue/Saturation 1
Layer 13 copy
Layer 13
Layer 12
Layer 11 copy
Layer 11
Layer 10
Layer 9
Layer 8
Layer...
Layer 7
Layer 6
Layer 5
Layer...
Layer 4 copy

46 Control-click (or Command-click) the adjustment layer's mask to load it as a selection. Create a new layer and select the Gradient tool. Ensure that the Foreground to Transparent option is enabled and that the Radial method is selected in the Tool Options bar. Hold down the Alt (or Option) key to temporarily access the Eyedropper tool. Click in one of the lightest regions of the central orb of his forehead to set the foreground color to the color of that region. Ensure that the new layer is targeted and that the current selection is active. Click and drag within the selection border over each eye to create a couple of small radial gradients. Click from the eyelid down so that these gradients are strongest at the top each eye. Use this same method to create a few smaller gradients within the selection over his teeth on the new layer as well. Change the blending mode of the layer to Overlay.

Creating adjustment layers

You'll notice as you work through this book that I always tend to create new fill and adjustment layers by using the menu available at the bottom of the Layer palette. However, if the main menu appeals to you more, you can always create a new fill or adjustment layer via the New Fill Layer or



ADJUSTMENTS MASKS

Selective Color: Custom

Colors: Whites

Cyan: 0 %

Magenta: 0 %

Yellow: +6 %

Black: 0 %

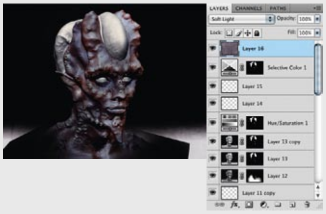
○ Relative ● Absolute

LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Selective Color 1
Layer 15
Layer 14
Hue/Saturation 1
Layer 13 copy
Layer 13
Layer 12
Layer 11 copy
Layer 11
Layer 10
Layer 9
Layer 8
Layer...
Layer 7
Layer 6
Layer 5

47 Create a new layer and then introduce a couple of smaller gradients into the active selection at the bottom of his eyes on the new layer. This will help make his eyes appear as though they are glowing. While the selection is still active, choose the Selective Color option from the Create New Fill or Adjustment Layer menu at the bottom of the Layers palette to create a Selective Color layer. In the Adjustments panel, choose whites from the Colors menu and increase the yellow content by 6.

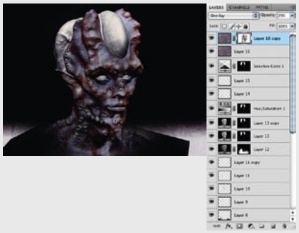
Adding texture

Remedy the plastic feeling of this 3D model by adding a desktop scan as surface texture.

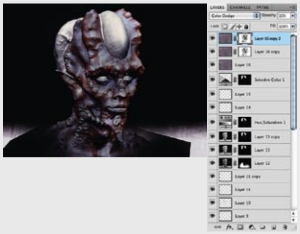


LAYERS
CHANNELS
PATHS
Soft Light
Opacity: 100%
Lock:
Fill: 100%
Layer 16
Selective Color 1
Layer 15
Layer 14
Hue/Saturation 1
Layer 13 copy
Layer 13
Layer 12
Layer 11 copy

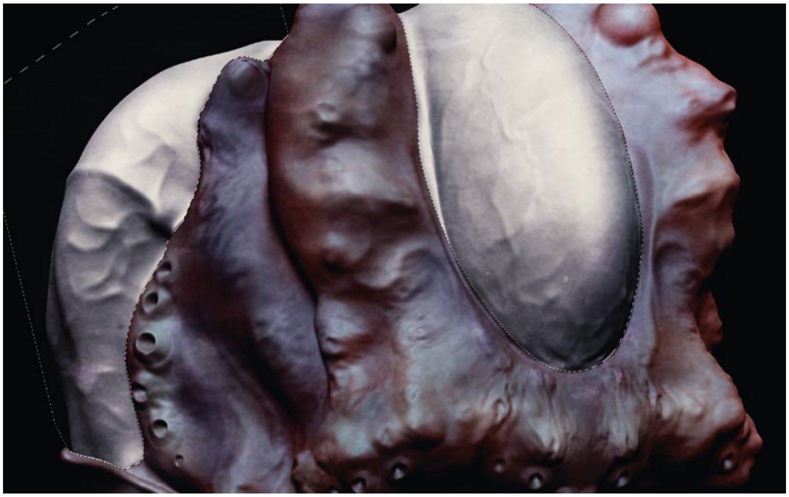
1 Open the *texture.jpg* file. Use the Move tool to drag it into the working file as a new layer while holding down the Shift key. Change the blending mode of this new layer to Soft Light.

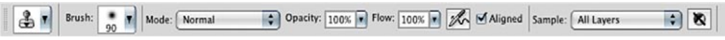


2 Duplicate the layer and change the blending mode of the duplicate layer to Overlay. Reduce the opacity of the layer to 29% and add a layer mask. Use a soft, round brush and a black foreground color to paint over raised areas of the figure within the mask, thus hiding the texture in these areas. Vary brush size and opacity as necessary.



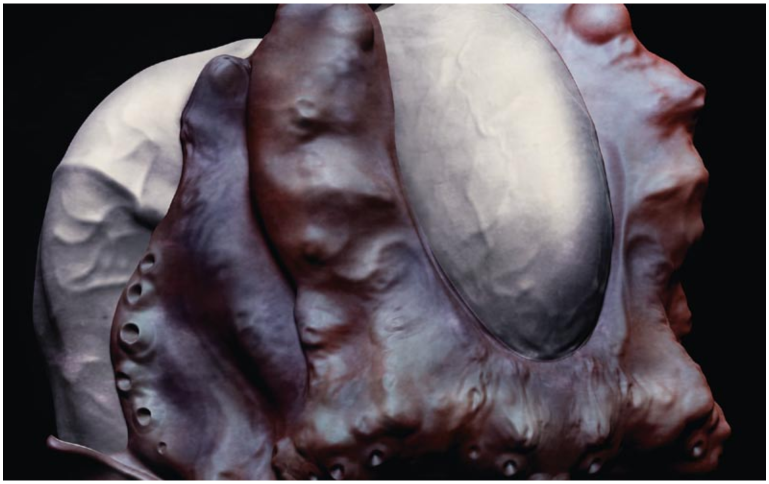
3 Duplicate this layer and change the blending mode to Color Dodge. Reduce the opacity of the layer to 10%. This will brighten the underlying image using unmasked areas of the layer. If certain areas seem too prominent or not prominent enough, feel free to edit the mask further.

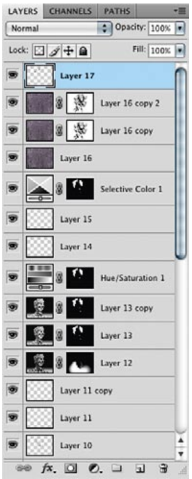




Brush: 90 Mode: Normal Opacity: 100% Flow: 100% ☑ Aligned Sample: All Layers

48 Load a selection from any of your masks that reveal only the head lobes, eyes, and teeth. This can be the Selective Color layer, the Hue/Saturation layer, or either of the two image layers that meet this requirement. Select the Clone Stamp tool and create a new layer. Ensure that the new layer is targeted and that the selection is currently active. In the Tool Options bar, choose All Layers from the Sample menu. Zoom in closely on the creature's head lobes and you'll see a few regions that need repairing before we go any further. Areas of concern are the bright area at the left of the frontal lobe and other bright areas where the back lobe meets the darker purple part of his head.



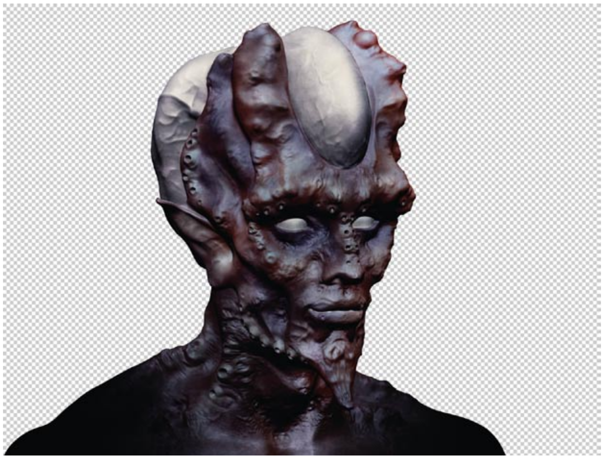


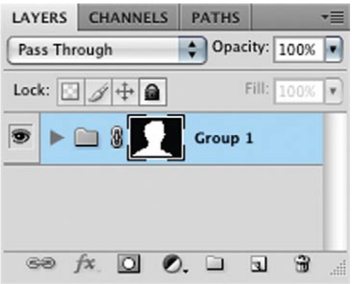
LAYERS
CHANNELS
PATHS
Lock:
Layer 17
Layer 16 copy 2
Layer 16 copy
Layer 16
Selective Color 1
Layer 15
Layer 14
Hue/Saturation 1
Layer 13 copy
Layer 13
Layer 12
Layer 11 copy
Layer 11
Layer 10

Normal Opacity: 100% Fill: 100%

49 What you need to do now is find an area in need of repair and then Alt-click (or Option-click) in the neighboring area to sample it. Then paint over the area in need of repair with the newly sampled region. The best results will be achieved by sampling often and very close to areas in need of repair, since we'll as painting in small strokes. In some cases you'll be literally stamping instead of painting, merely clicking once instead of clicking and dragging. Use a soft round brush tip preset and vary the size as required. I recommend leaving the opacity set at 100 to ensure that the results do not appear too soft compared to the rest of the image. Deselect.

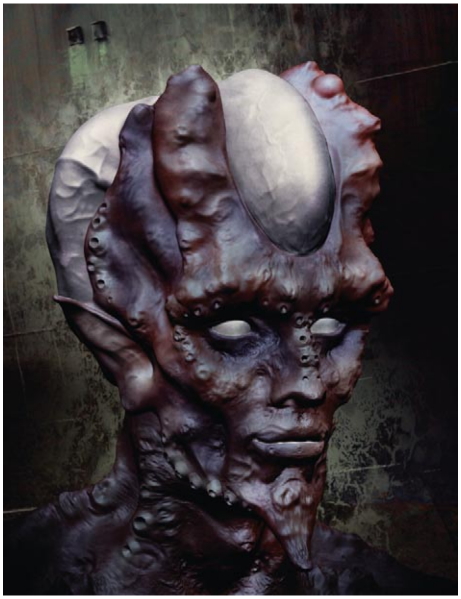
PART EIGHT: Putting the composition together

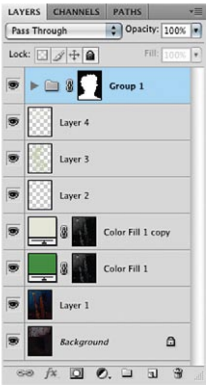




Pass Through
Opacity: 100%
Fill: 100%

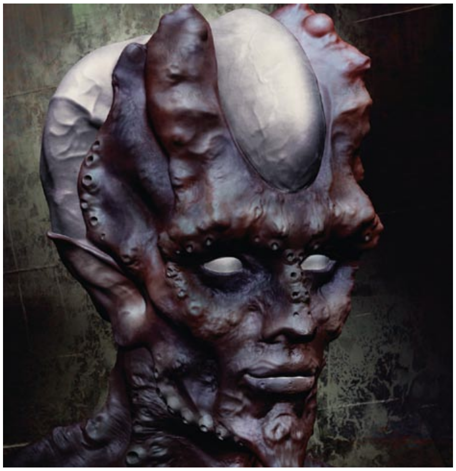
50 Hold down the Alt (or Option) key and double-click the background layer in the Layers palette to convert it to a standard layer. Target the new layer, which will be called Layer 0. Then hold down the Shift key and click the top layer in the Layers palette as well. This will target all the layers in the palette. Press Control-G (or Command-G) to group them. Next, find the *Head Channel.psd* file. Select all and copy. Return to your head working file and create a new channel in the Channels palette. Paste the copied art into the channel and then Control-click (or Command-click) the channel's thumbnail to load it as a selection. While the selection is active, target your new group in the Layers palette and click the Add Layer Mask button to mask the group.

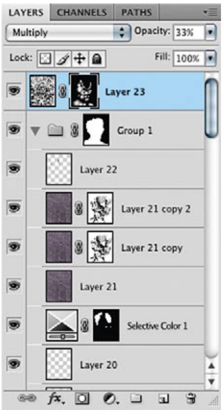


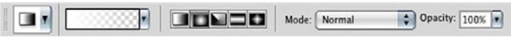


Pass Through
Opacity: 100%
Fill: 100%

51 Now you should still have your working file open. Remember, the file that contained the multilayered background that we created in Part 5? I know that a lot has happened since then, so if you closed it, open it up again. Now, in the Layers palette, drag the group from your head working file into the working file that contains the background that you created previously. Move the group to the top of the stack in the Layers palette if necessary and use the Move tool to reposition the visible artwork on the canvas.



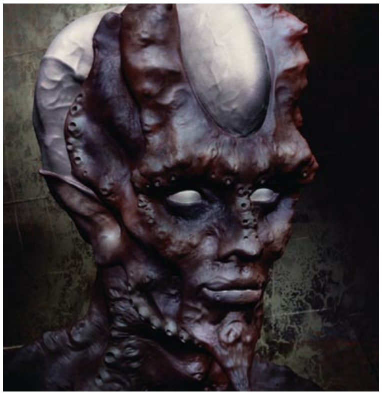

Multiply
Opacity: 33%
Fill: 100%

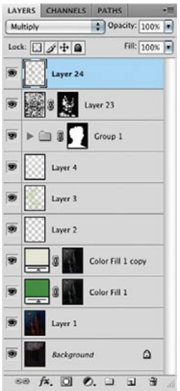

Mode: Normal
Opacity: 100%

52 Load a selection from the alpha channel that contains the contents of the *glass.jpg* file that you created earlier. While the selection is active, create a new layer and set the foreground color to black by pressing the d key. Then press Alt-Delete (or Option-Delete) to fill the selection on the new layer with black. Deselect and change the blending mode of the layer to Multiply. Reduce the opacity of the layer to 33%. Now hold down the Alt (or Option) key and click the Add Layer Mask button at the bottom of the Layers palette to add a mask to the layer, which is completely filled with black, thus hiding the contents of the entire layer. Select the Gradient tool and set the current foreground color to white. Ensure that the Foreground to Transparent preset is selected and that the Radial method is chosen in the Tool Options bar. Click and drag within the mask to reveal sections of the layer.

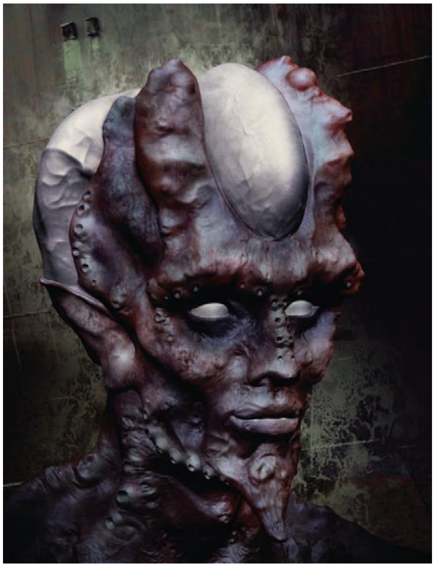
Renamed layers?

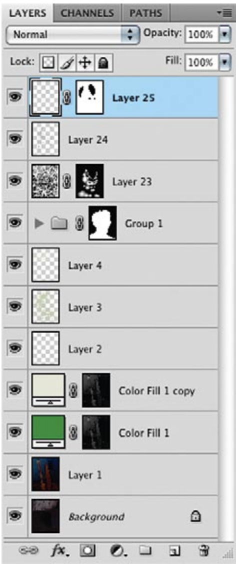
When you drag your group into the working file, take a look inside the group and you'll notice that the numbers within the names of your layers are increased. Don't worry, everything is fine. It is just that Photoshop CS4 is smart enough to find all layers that have not been named and then rename them sequentially. Only the names are affected; the layers themselves and the hierarchy do not change. Also, if you have done something differently along the way, such as skipping a layer or combining layers, your numbered layers will not match up exactly with those shown here. Again, don't fret, simply obey the spirit of this chapter and focus more on getting the techniques down so that your image resembles the one shown here.




Multiply
Opacity: 100%
Fill: 100%

53 Create a new layer and change the blending mode of the layer to Multiply. Load the same channel as a selection once again. Select the Brush tool and then temporarily switch to the Eyedropper tool by holding down the Alt (or Option) key. Click an area of deep red or burgundy within the image to sample that color and then release the Alt (or Option) key. Use a large, soft, round brush tip and varying opacity settings as you paint within the selection, over regions of similar color to emphasize it.

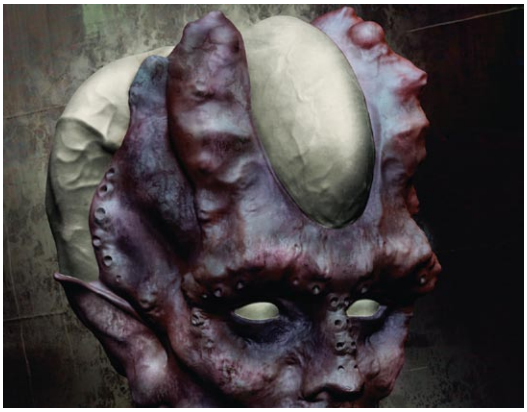


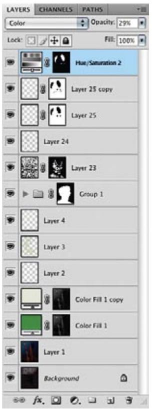


Normal
Opacity: 100%
Fill: 100%

Layer 25
Layer 24
Layer 23
Group 1
Layer 4
Layer 3
Layer 2
Color Fill 1 copy
Color Fill 1
Layer 1
Background

54 Click the foreground color swatch in the Toolbar to access the picker. Select a somewhat luminous light blue color and click OK. Invert your currently active selection and create a new layer. Paint with the same brush, albeit a lower opacity setting, within the inverted selection, over raised regions of the creature's head. This will help create the illusion of textured highlights. Deselect and expand the group that contains the head layers. Control-click (or Command-click) a Mask thumbnail that reveals just the head lobes, eyes, and teeth to load a selection from the mask. This could easily be the mask attached to the Selective Color layer or the Hue/Saturation layer. When the selection loads, hold down the Control-Alt-Shift (or Command-Option-Shift) keys while you click the Groups Mask thumbnail in the Layers palette. This will perform an intersection and chop away the area of your selection that lies outside his head. Hold down the Alt (or Option) key and click the Add Layer Mask button.

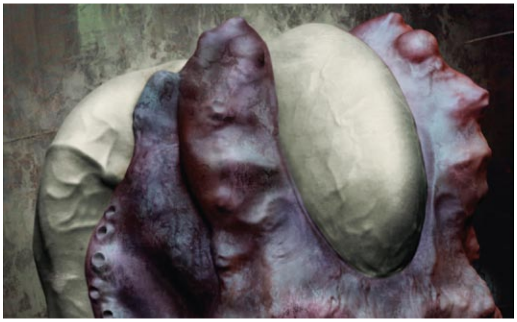


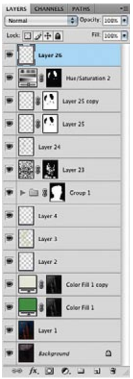


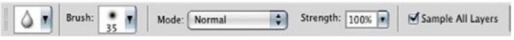
Color
Opacity: 29%
Fill: 100%

Hue/Saturation 2
Layer 25 copy
Layer 25
Layer 24
Layer 23
Group 1
Layer 4
Layer 3
Layer 2
Color Fill 1 copy
Color Fill 1
Layer 1
Background

55 Duplicate the layer and change the blending mode of the duplicate layer to Soft Light. Load a selection from the layer's mask and then invert the selection. With the inverted selection active, create a new Hue/Saturation adjustment layer. In the Adjustments panel, enable the Colorize option. Then set the hue to 75 and the saturation to 74. Next, in the Layers palette, change the blending mode of the adjustment layer to Color and reduce the opacity to 29%.



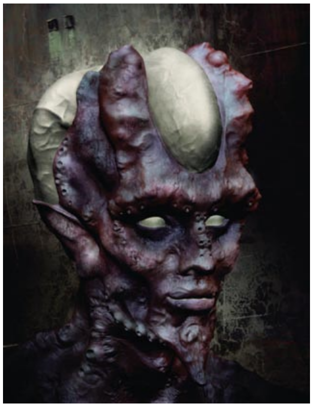

LAYERS
CHANNELS
PATHS
Normal
Opacity: 100%
Lock:
Fill: 100%
Layer 26
Hue/Saturation 2
Layer 25 copy
Layer 25
Layer 24
Layer 23
Group 1
Layer 4
Layer 3
Layer 2
Color Fill 1 copy
Color Fill 1
Layer 1
Background

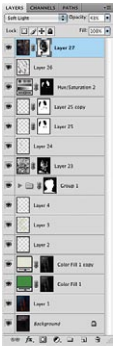


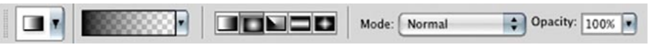
Brush: 35 Mode: Normal Strength: 100% ☑ Sample All Layers

56 Select the Blur tool. Set the Strength to 100 and enable the Sample All Layers option in the Tool Options bar. Create a new layer and ensure that it is targeted in the Layers palette. Paint with the Blur tool over any areas that appear too harsh or sharp to soften them. This will help integrate the creature into the environment as well as make sure that areas such as his eyes and head lobes don't look like they were pasted on after the fact. Use a soft, round tip and vary the size as necessary. Also, feel free to use the Clone Stamp tool to perform any minor repairs you deem necessary on this layer. Think of this as the final repairs layer before we begin embellishing the image and adding texture overall.

PART NINE: Surface texture and embellishments




LAYERS
CHANNELS
PATHS
Soft Light
Opacity: 43%
Lock:
Fill: 100%
Layer 27
Layer 26
Hue/Saturation 2
Layer 25 copy
Layer 25
Layer 24
Layer 23
Group 1
Layer 4
Layer 3
Layer 2
Color Fill 1 copy
Color Fill 1
Layer 1
Background

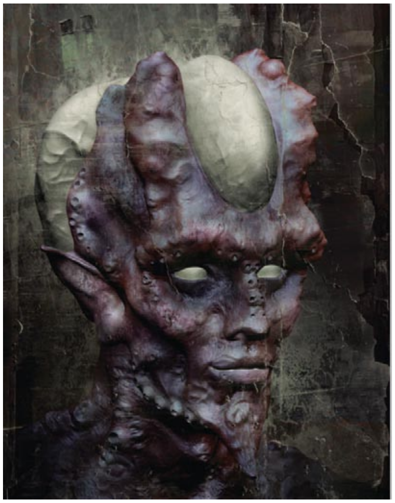


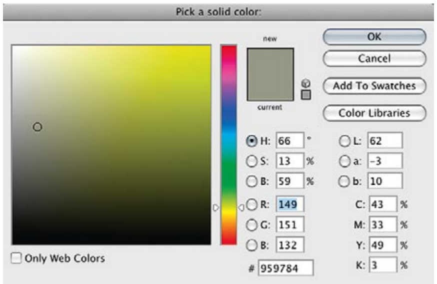
Mode: Normal Opacity: 100%

Not-so-white highlights

You'll notice in nearly every instance where I create highlights that I never use solid white. I always use a light version of some sort of color. The reasoning for this is basic observation. In the real world, highlights are rarely pure white, so creating pure white highlights in an image just looks fake. The result is simply too harsh, and if you want to brighten highlights further, using color gives you room to continue; white does not.

57 Open the *wall.jpg* file. Select all and copy. Paste it into the working file as a new layer and change the blending mode of the layer to Soft Light. Reduce the opacity of the layer to 43% and then click the Add Layer Mask button to create an empty layer mask. Target the new mask in the Layers palette and select the Gradient tool. Set the foreground color to black. In the Tool Options bar, ensure that the Foreground to Transparent gradient preset is selected and the Radial method is selected. Create a number of gradients within the mask that hide the texture primarily over regions of the creature's face.

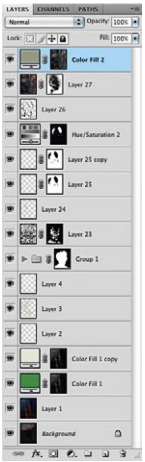




Pick a solid color:

OK
Cancel
Add To Swatches
Color Libraries
new
current

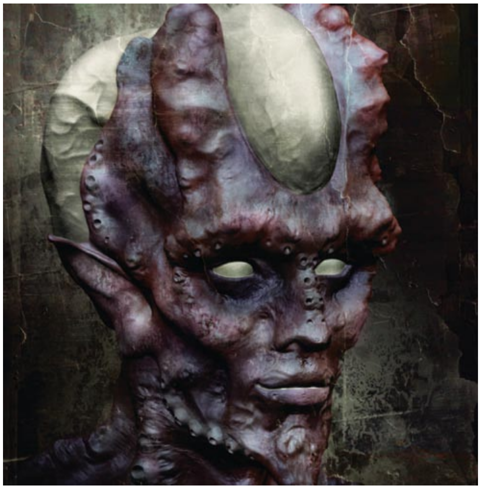
H: 66 °
S: 13 %
B: 59 %
R: 149
G: 151
B: 132
L: 62
a: -3
b: 10
C: 43 %
M: 33 %
Y: 49 %
K: 3 %
959784
☐ Only Web Colors

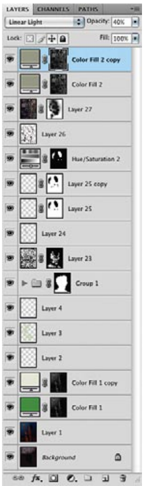


Normal
Opacity: 100%
Fill: 100%

LAYERS
CHANNELS
PATHS
Lock:
Color Fill 2
Layer 27
Layer 26
Hue/Saturation 2
Layer 25 copy
Layer 25
Layer 24
Layer 23
Group 1
Layer 4
Layer 3
Layer 2
Color Fill 1 copy
Color Fill 1
Layer 1
Background

58 Target the new layer instead of the mask in the Layers palette. It is very important that you click the Layer thumbnail and not the Mask thumbnail for this to work properly. Once you have the layer targeted, select all and copy. Then, in the Channels palette, create a new alpha channel and paste the copied art into it. Load the channel as a selection and return to the Layers palette. While the selection is active, select the Solid Color option from the Create New Fill or Adjustment Layer menu at the bottom of the Layers palette to create a new, masked, solid color layer. When the picker appears, run the mouse pointer over a medium green color in the creature's frontal lobe and click OK.

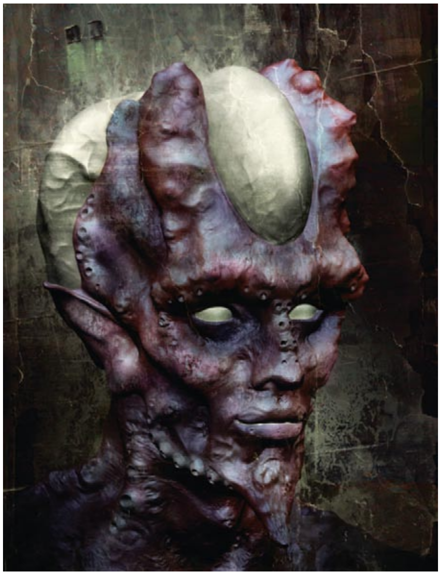


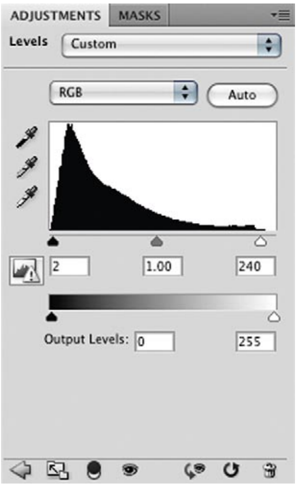


Linear Light
Opacity: 40%
Fill: 100%

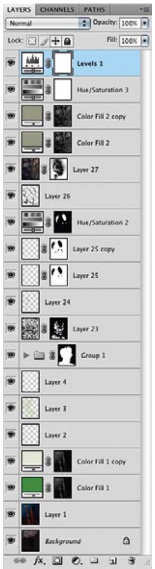
LAYERS
CHANNELS
PATHS
Lock:
Color Fill 2 copy
Color Fill 2
Layer 27
Layer 26
Hue/Saturation 2
Layer 25 copy
Layer 25
Layer 24
Layer 23
Group 1
Layer 4
Layer 3
Layer 2
Color Fill 1 copy
Color Fill 1
Layer 1
Background

59 Change the blending mode of the new solid color layer to Linear Dodge (Add) and reduce the opacity to 40%. Duplicate the layer and then change the blending mode of the duplicate layer to Linear Light. This is an excellent method for building up surface texture to help unify the composition. However, the downfall of this method is that there might be regions where the texture appears too prominent. The best way to remedy this is to target each solid color layer's mask separately and introduce some Black to Transparent gradients into the existing masks, hiding regions that appear too strong.




ADJUSTMENTS
MASKS
Auto

Levels: Custom
RGB
2 1.00 240
Output Levels: 0 255

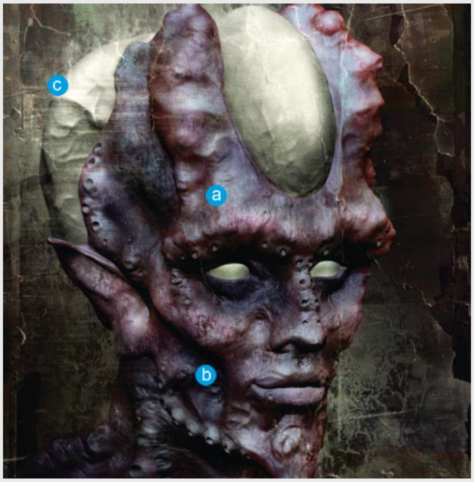

LAYERS
CHANNELS
PATHS
Lock:
Levels 1
Hue/Saturation 3
Color Fill 2 copy
Color Fill 2
Layer 27
Layer 26
Hue/Saturation 2
Layer 25 copy
Layer 25
Layer 24
Layer 23
Group 1
Layer 4
Layer 3
Layer 2
Color Fill 1 copy
Color Fill 1
Layer 1
Background

Normal
Opacity: 100%
Fill: 100%

60 Now that we've added some texture, it is time to enhance the overall color and contrast. Create a new Hue/Saturation adjustment layer. In the Adjustments panel, simply increase the saturation by 12. Then create a Levels adjustment layer by choosing the levels option from the Create New Fill or Adjustment Layer menu as well. Simply drag the left and right input levels sliders inward a little, in the Adjustments panel, to increase the overall contrast slightly.

Where to go from here

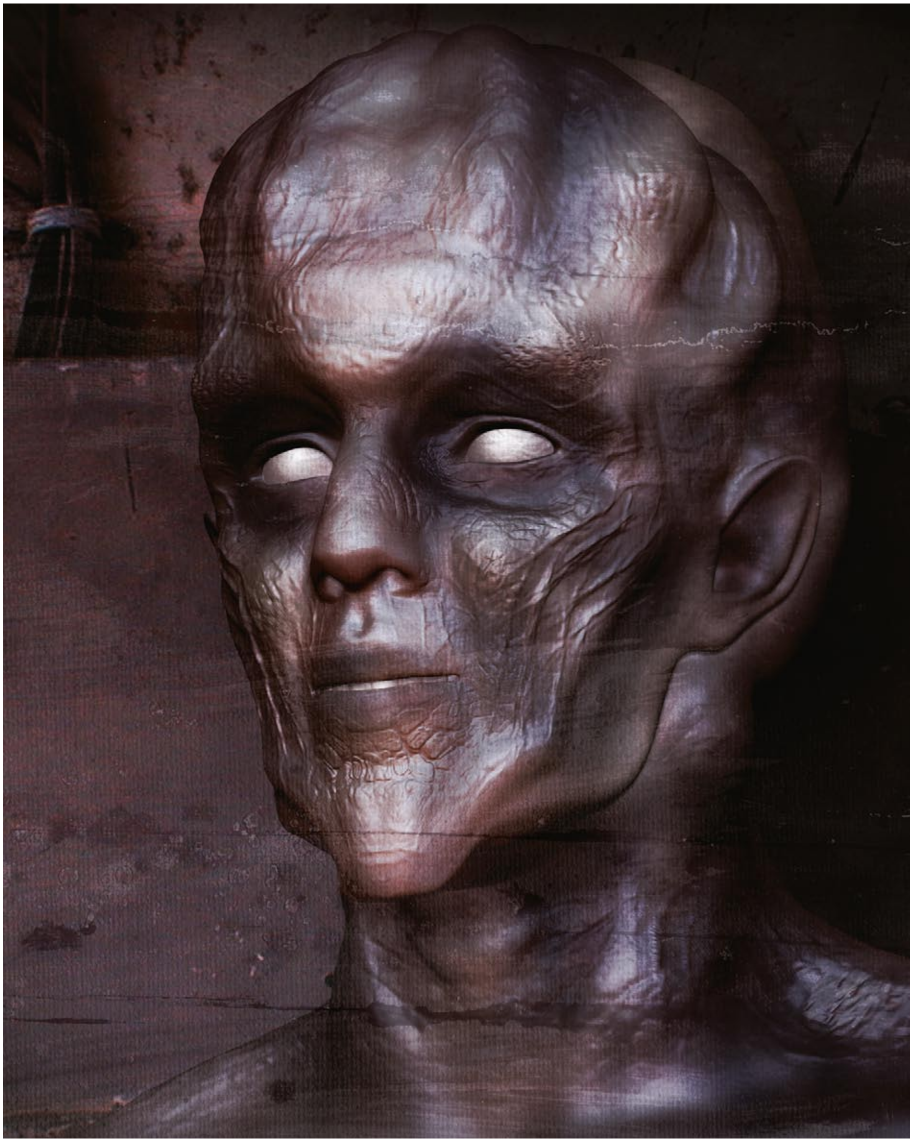
Embellish the image further, employing the methods you've learned thus far.



a The raised regions could use some lighter areas at the highest points, to define them better. Try loading the glass channel as a selection again and then painting in within the selection in these areas on a new layer, using a very light color.

b Recessed regions could use a little more definition as well to enhance the volume of the creature. Try painting dark colors, at a low opacity on a new layer using a Linear Burn or Multiply blending mode. Gently build up darkness by overlaying strokes. Try working within a channel-based selection at times as well.

c Duplicate some of the texture layers and then mask out regions that cover the face. This will enhance the distress around the edges and, again, assist in unifying the composition.



Here's another image that used the same head tool as a starting point. Other than that, I used some different alphas and a different approach to the sculpting process. After that, the same procedure was used in Photoshop to put it all together. The main difference here, apart from the figure itself, is the textures.

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